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## ABSTRACT

This glossary contains terms and definitions found in the handbooks of standard educational terminology that constitute the State Educational Records and Reports Series. By serving as a quick alphabetical reference to terms and definitions, it is intended to promote comparability and compatibility of recorded and reported educational information. Terms are presented in alphabetical order, followed by their definitions and a roman-numeral code that indicates which of the 11 handbooks contain each term and definition. Terms relating to subject-matter areas are referenced to the appendix, which is a reproduction of chapter 6 of the handbook, Standard Terminology for Curriculum and Instruction in Local and State School Systems. (Author/JG)

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# COMBINED GLOSSARY

## Terms and Definitions From the Handbooks of the State Educational Records and Reports Series

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## FOREWORD

This Combined Glossary contains terms and their definitions found in the handbooks of standard educational terminology constituting the *State Educational Records and Reports Series*. It is a timely publication to be used as a quick alphabetical reference to terms and definitions, thus promoting an achievement of comparability and compatibility of recorded and reported educational information.

When there were only a few of the handbooks of standard educational terminology, it was relatively easy to locate terms and their definitions. Now, however, with the growing shelf of cooperatively developed handbooks, users are faced with increasing difficulty in finding the terms and definitions they want and need for improved educational records and reports. This Combined Glossary presents handbook terms in alphabetical order, with their definitions, enabling users of the handbooks to find not only the defined terms, but also to associate them with the handbook or handbooks in which they are published and classified.

This Combined Glossary has been developed by the staff of the Educational Data Standards Branch, National Center for Education Statistics. Extensive work was required to do essential cross-referencing, to resolve problems of arrangement of multiworded terms, and to develop the coding to show the chronological sequence of definitions.

Special credit is due to Ivan N. Seibert, who directed the project, and to W. Dale Chismore and Dorothy T. Lenz for their able assistance in the process of compiling and editing.

Maintaining the Combined Glossary is a continuing responsibility of the Educational Data Standards Branch. Even as this first edition is published, new handbooks of standard educational terminology are nearing completion. Their defined terms will be included in subsequent editions of the Combined Glossary.

Absalom Simms  
Director, Division of  
Intergovernmental Statistics

Allan R. Lichtenberger  
Chief, Educational Data  
Standards Branch

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## INTRODUCTION

The terms and definitions contained in this Glossary are taken primarily from 11 handbooks of the State Educational Records and Reports Series. Those handbooks, with Roman numeral codes, are listed below in sequential order.

- I *The Common Core of State Educational Information*
- II *Financial Accounting for Local and State School Systems—Standard Receipt and Expenditure Accounts*
- III *Property Accounting for Local and State School Systems*
- IV *Staff Accounting for Local and State School Systems*
- V *Pupil Accounting for Local and State School Systems*
- II B *Principles of Public School Accounting*
- VI *Standard Terminology for Curriculum and Instruction in Local and State School Systems*
- VII *The State Education Agency*
- III R *Financial Accounting—Classifications and Standard Terminology for Local and State School Systems (Revised)*
- IV R *Staff Accounting—Classifications and Standard Terminology for Local and State School Systems (Revised)*
- V R *A Handbook of Standard Terminology and a Guide for Managing Student/Pupil Data in Elementary, Secondary, Community/Junior College, and Adult Education (Revised)*

A few terms and definitions, not found in the above handbooks, are taken from unpublished Handbooks VIII (Community Characteristics) and IX (Adult/Continuing Education). Definitions marked "Unpublished" should be considered as provisional at this time. Such definitions will be reviewed cooperatively in subsequent handbook development or revision. Terms relating to subject-matter areas are referenced to the appendix for definition. The appendix is a reproduction of chapter 6 of Handbook VI.

Following each definition, the Roman numerals show sequentially, from left to right, the handbooks which contain that term and a definition of the term. A comma (,) is used to separate handbook numbers when there was *no change* in the definition. A dash (-) is

used to separate handbook numbers when there was a *change* in the definition. The last number in the series indicates the source of the definition which appears in this book.

For example, (I, II, VII-VR) would mean that the term was defined identically in Handbooks I, II, and VII, the term was redefined (changed) in Handbook VR, and the definition contained in this Glossary is taken directly from Handbook VR (the latest handbook in the series to define that particular term).



A GLOSSARY OF TERMS AND DEFINITIONS  
PRESENTED IN THE HANDBOOKS OF THE STATE  
EDUCATIONAL RECORDS AND REPORTS SERIES

-A-

**ABATEMENT**—A reduction of a previously recorded expenditure or receipt item by such things as refunds, rebate, and collections for loss or damages to school property. (II, IIR)

**ABSENCE (student)**—Nonattendance of a student on a day or half day when school is in session. This frequently is counted to the nearest half day or half session. (V, VR) *See also* DAY OF ABSENCE and SESSION.

**ABSENT (staff)**—Not performing assigned duties during the hours of the day when such duties are to be performed. (IV)

**ACADEMIC YEAR**—*See* REGULAR SCHOOL TERM.

**ACCELERATED PROMOTION**—A promotion indicating progress which is more rapid than the usual practice; this may involve a "double promotion" (two grades' progress in one year) or some other arrangement for promoting a child at a rate more rapid than one grade per year. (V-VI)

**ACCELERATION**—The completion of a predetermined amount of schoolwork in less time than is required normally. (VI)

**ACCESSIBILITY**—In land use, a measurement of the spatial distribution of activities about a point, adjusted for the ability and desire of people or firms to overcome physical separation. (Unpublished VIII)

**ACCOUNT**—A descriptive heading under which are recorded financial transactions that are similar in terms of a given frame of reference, such as purpose, object, or source. (II-IIB-IIR)

**ACCOUNT, CONTROLLING**—*See* CONTROLLING ACCOUNT.

**ACCOUNT, PROPERTY**—*See* PROPERTY ACCOUNT.

**ACCOUNT, SUMMARY**—*See* SUMMARY ACCOUNT.

**ACCOUNTABILITY**—The capability and the responsibility to account for the expenditure of money and the commitment of other resources in terms of the results achieved. This involves both the stewardship of money and other resources and the evaluation of achievement in relation to specified goals. (VII, IIR, IVR)

**ACCOUNTANT**—A person who, by virtue of education and experience, is competent to (1) design accounting systems; and (2) record, classify, and summarize financial transactions and interpret and report on the results of financial operations and on the financial status of the school district. (IV-IIB)

**ACCOUNTING**—The procedure of maintaining systematic records of happenings, occurrences, and events relating to persons, objects, or money and summarizing, analyzing, and interpreting the results of such records. (IV-IIB-VII, IIR, IVR-VR)

**ACCOUNTING (subject matter)**—*See* appendix, p. 150.

**ACCOUNTING AND COMPUTING OCCUPATIONS (subject matter)**—*See* appendix, p. 230.

**ACCOUNTING, COST**—*See* COST ACCOUNTING.

**ACCOUNTING, FINANCIAL**—*See* FINANCIAL ACCOUNTING.

**ACCOUNTING, MEMORANDUM**—*See* MEMORANDUM ACCOUNTING.

**ACCOUNTING, PROPERTY**—*See* PROPERTY ACCOUNTING.

**ACCOUNTING, SINGLE FUND**—*See* SINGLE FUND ACCOUNTING.

**ACCOUNTING, STAFF**—See **STAFF ACCOUNTING**.

**ACCOUNTING, STUDENT**—See **STUDENT ACCOUNTING**.

**ACCOUNTING ASSIGNMENT**—An assignment to design and maintain financial, staff, pupil, program, or property records; to summarize, analyze, or verify such records; and/or to control and certify expenditures and receipts. (IV-IVR)

**ACCOUNTING LEDGERS**—See **LEDGER**.

**ACCOUNTING PERIOD**—A period at the end of which and for which financial statements are prepared; for example, July 1 to June 30. (II-IIB-IIR)

**ACCOUNTING PROCEDURE**—The policy and systematic arrangement of methods and operations; and the flow of documents for recording accounting information so as to provide internal control and produce accurate and complete records and statements. (IIB)

**ACCOUNTING SYSTEM**—The total mechanism of records and procedures of recording, retrieving, and reporting information on the financial position and operations of a governmental unit or any classifying of its funds, balanced account groups, and organizational components. (IIB-IIR, IVR)

**ACCOUNTS, ADVANCEMENT**—See **ADVANCEMENT ACCOUNTS**.

**ACCOUNTS, BALANCE SHEET**—See **BALANCE SHEET ACCOUNTS**.

**ACCOUNTS, BUDGETARY**—See **BUDGETARY ACCOUNTS**.

**ACCOUNTS, CLEARING**—See **CLEARING ACCOUNTS**.

**ACCOUNTS, FUND**—See **FUND ACCOUNTS**.

**ACCOUNTS, SUBSIDIARY**—See **SUBSIDIARY ACCOUNTS**.

**ACCOUNTS PAYABLE**—Unpaid balances or invoices which are due and owing to private persons, firms, governmental units, or others. (II-IIB-VII)

**ACCOUNTS RECEIVABLE**—Amounts owing an open

account from private persons, firms, or corporations for goods and services furnished by an LEA (but not including amounts due from other funds or from other governmental units). Although taxes receivable are covered by this term, they should be recorded and reported separately in the Taxes Receivable account. (II-IIB-VII-IIR)

**ACCREDITATION**—An official decision by the State department of education, or another recognized agency having official authority, that, in its judgment, the unit has met the established standards of quality (which may or may not have legal status). (IV-VI)

**ACCREDITATION STATUS**—That status held by an institution on the basis of evaluation by State, regional, national, or professional accrediting agencies. Accreditation status refers to the accreditation of the institution granting credits earned by the staff member for certification purposes. (IV)

**ACCRUAL BASIS**—The basis of accounting under which revenues are recorded when earned or when levies are made, and expenditures are recorded as soon as they result in liabilities, regardless of when the revenue is actually received or the payment is actually made. (II-IIB-VII, IIR) See also **CURRENT EXPENSE**; **ESTIMATED REVENUE**; and **EXPENDITURES**.

**ACCRUE**—To record revenues when earned or when levies are made, and to record expenditures as soon as they result in liabilities, regardless of when the revenue is actually received or the payment is actually made. Sometimes, the term is used in a restricted sense to denote the recording of revenues earned but not yet due, such as accrued interest on investments and the recording of expenditures which result in liabilities that are payable in another accounting period, such as accrued interest on bonds. (II-IIB-VII, IIR) See also **ACCRUAL BASIS**; **ACCRUED EXPENSES**; **ACCRUED LIABILITIES**; and **ACCRUED REVENUE**.

**ACCRUED EXPENSES**—Expenses which have been incurred and have not been paid as of a given date. (II-IIB-VII-IIR) See also **ACCRUAL BASIS** and **ACCRUE**.

**ACCRUED INTEREST**—Interest accumulated between interest dates but not yet due. (II-VII-IIR)

**ACCRUED INTEREST ON INVESTMENTS PURCHASED**—Interest accrued on investments between

the last interest payment date and date of purchase. The account is carried as an asset until the first interest payment date after date of purchase. At that time an entry is made debiting account Cash and crediting the Accrued Interest on Investments Purchased account for the amount of interest purchased and an Interest Earnings account for its balance. (IIR)

**ACCRUED INTEREST PAYABLE**—Interest which is due and payable and has been recorded in the Payable accounts as an expenditure but for which payment has not been made. (IIB)

**ACCRUED INTEREST RECEIVABLE**—Interest which has been earned and has been recorded as revenue but which has not been collected. (IIB)

**ACCRUED LIABILITIES**—Amounts owed but not yet due, for example, accrued interest on bonds or notes. (II, VII, IIR) See also ACCRUED EXPENSES.

**ACCRUED REVENUE**—Levies made or other revenue earned and not collected regardless of whether due or not. (II-IIB-VII-IIR)

**ACHIEVEMENT TEST**—An examination that measures the extent to which a person has acquired certain information or mastered certain skills, usually as a result of specific instruction. (VR)

**ACQUISITION OR IMPROVEMENT OF FIXED ASSETS**—The service area consisting of those activities which have as their purpose acquisition of fixed assets, additions to fixed assets, and improvement of fixed assets. It consists of such activities as purchasing initial or additional equipment, buildings, and land; remodeling buildings, initial installation or extension of service systems and other built-in equipment, construction of new buildings or additions to buildings, improvements to sites, and manufacturing initial or additional equipment. (IV)

**ACTIVE MEMBERSHIP STATUS**—The membership status of students who have attended classes during a given school term and have not withdrawn or been assigned to inactive status because of being absent for a given number of consecutive days. (VR)

**ACTIVITIES (board members/staff)**—The purposeful actions on the part of board members or staff members in carrying out their respective responsibilities. (IV-VII)

**ACTIVITIES, COCURRICULAR**—See COCURRICULAR ACTIVITIES.

**ACTIVITIES, EXTRACURRICULAR**—See COCURRICULAR ACTIVITIES.

**ACTIVITIES, JUDICIARY**—See JUDICIARY ACTIVITIES.

**ACTIVITIES, NONSCHOOL**—See NONSCHOOL ACTIVITIES.

**ACTIVITIES, SECONDARY ECONOMIC**—See SECONDARY ECONOMIC ACTIVITIES.

**ACTIVITIES, STUDENT BODY**—See STUDENT BODY ACTIVITIES.

**ACTIVITIES, WELFARE**—See WELFARE ACTIVITIES.

**ACTIVITY ASSIGNMENT CLASSIFICATION**—A classification of staff assignments by groupings of activities which are recognized as being much alike in their nature. (IV)

**ADA**—A term referring to average daily attendance. (V, VR) See also AVERAGE DAILY ATTENDANCE.

**ADAPTED (room)**—A room that has been changed through physical modification, such as movement of fixed walls or partitions, the installation of special built-in equipment designed for the type of instructional activity that is to be accommodated in the room, or removal of built-in equipment. (III)

**ADDITIONS TO PROPERTY**—Land and buildings that add to the area of existing land and buildings, and equipment items that add to the existing number of equipment items. The term also includes attachments added to individual pieces of equipment already on hand. It does not include replacements of equipment. (III) See also REPLACEMENT OF EQUIPMENT.

**ADJUSTED ROUTING PATTERNS**—An adaptation of the normal school bus routings to return to their homes those students involved in school activities in after-school hours. (Unpublished VIII)

**ADJUSTING ENTRIES**—Entries made at the end of an accounting period to bring accounts up to date. For example, a school district may have prepaid insurance;

that portion of the prepayment which pertains to the accounting period is changed to expenditures by an adjusting entry which debits Expenditures and credits Prepaid Insurance. (IIB)

**ADM**—A term referring to average daily membership. (V, VR) *See also* AVERAGE DAILY MEMBERSHIP.

**ADMINISTRATION**—The act of managing or directing the activities of an LEA or a portion of these activities. (I-II, III-VII-IIR-IVR)

**ADMINISTRATION AREAS**—Building areas devoted to school business activities, pupil personnel management, or public relations where such areas are not designated for other purposes. (III)

**ADMINISTRATION BUILDING**—A building used primarily for housing personnel and equipment engaged in activities which have as their purpose the general regulation, direction, and control of the affairs of the school district that are systemwide and not confined to one school, subject, or narrow phase of school-activity. (III)

**ADMINISTRATIVE ACTION**—Any action which results in the general regulation, direction, or control of the affairs of the organizational unit. (VII, IIR, IVR)

**ADMINISTRATIVE ASSISTANT ASSIGNMENT**—An assignment to perform activities assisting an executive officer in performing his assigned activities in the local education agency. (IV-IIR, IVR)

**ADMINISTRATIVE INTERN ASSIGNMENT**—An assignment to perform activities which are a part of an internship plan during which the staff member is supervised periodically and his performance evaluated. (IIR, IVR)

**ADMINISTRATIVE JURISDICTION**—A geographic area used as the basis for performing one or more administrative functions. Examples: county, town, sewer district, water district, school district, police precinct. (Unpublished VIII)

**ADMINISTRATIVE PERSONNEL**—Staff members on the LEA payroll who are primarily engaged in activities which have as their purpose the general regulation, direction, and control of the affairs of the LEA. (II, III-IV-IIR-IVR)

#### **ADMINISTRATIVE STAFF MEMBERS PER 1,000 STUDENTS IN AVERAGE DAILY MEMBERSHIP**

The number representing the total full-time equivalency of principal assignments, assistant principal assignments, central administrative staff assignments (including area administrators and their staffs), and assignments for supervising, managing, and directing academic departments in the schools during a given period of time, multiplied by 1,000 and divided by the average daily membership of students during this period. (VR)

**ADMINISTRATIVE UNIT**—A geographic area which, for specified public school purposes, is under the control of a board of education and the supervision of one or more administrative officers. (I, IV, V-VI, VII, VR)

**ADMINISTRATOR**—A staff member who has been given the responsibility to manage or direct the activities of an LEA or portion of these activities. (IVR)

**ADMISSION TEST**—An examination used in the admission procedure. It may be used as a part of the selective admission procedure to an educational institution or, as in some public colleges, as a device for validating work of doubtful quality. (VR)

**ADMISSIONS**—Money received for a school-sponsored activity such as a dance or football game. Admissions may be recorded in separate accounts according to the type of activity. (IIR)

**ADULT**—An individual who has reached a specified minimum legal age of adulthood, usually 18 years. (IV, V-VI) *See also* LEGAL ADULT.

**ADULT BASIC EDUCATION**—Learning experiences concerned with the fundamental tools of learning for adults who have never attended school or who have interrupted formal schooling and need this knowledge and these skills to raise their level of education, to increase self confidence, and/or self determination, to prepare for an occupation, and to function more responsibly as citizens in a democracy. (VI-IIR, IVR)

**ADULT/CONTINUING EDUCATION**—Instruction designed to meet the unique needs of adults and youth—beyond the age of compulsory school attendance—who have either completed or interrupted their formal education. This may be provided by a

school system, college, or other agency or institution (including a technical institute or area vocational school) through activities and media such as formal classes, correspondence study, radio, television, lectures, concerts, demonstrations, and counseling. (IIR, IVR-VR)

**ADULT/CONTINUING EDUCATION PROGRAM**—The program of instruction provided by a community/junior college or adult/continuing education instructional organization for adults and youth beyond the age of compulsory school attendance, including work toward a test of general educational development. (IIR-VR)

**ADULT/CONTINUING EDUCATION TUITION**—Money received as tuition for students attending adult/continuing education classes. Separate accounts may be maintained for tuition received for residents and for tuition received for nonresidents. (IIR)

**ADULT EDUCATION**—(IV-V-VI-VI-VR) See **ADULT/CONTINUING EDUCATION**.

**ADULT EDUCATION PROGRAM**—A program of instruction primarily for adults and youth beyond the age of compulsory school attendance. (V-VI) See also **ADULT EDUCATION** and **ADULT/CONTINUING EDUCATION PROGRAM**.

**ADULT LEARNER**—An adult who is enrolled in any course of study, whether special or regular, to develop new skills or qualifications, or improve existing skills and qualifications. (Unpublished IX)

**ADULT SCHOOL**—A separately organized school providing instruction for adults and youth beyond the age of compulsory school attendance. (V-VI, VR)

**AD VALOREM TAXES LEVIED BY ANOTHER GOVERNMENTAL UNIT**—Taxes levied for school purposes by a governmental unit other than the LEA. The LEA is not the final authority, within legal limits, in determining the amount to be raised. For example, after an LEA has determined that a certain amount of revenue is necessary, another governmental unit may exercise discretionary power in reducing or increasing the amount. Separate accounts may be maintained for real property and for personal property. (IIR)

**AD VALOREM TAXES LEVIED BY LEA**—Taxes levied by an LEA on the assessed valuation of real and

personal property located within the LEA which, within legal limits, is the final authority in determining the amount to be raised for school purposes. Separate accounts may be maintained for real property and for personal property. (IIR)

**ADVANCE FROM "A" FUND**—A liability account used to record a debt owed by one fund to another fund in the same governmental unit. It is recommended that separate accounts be maintained for each interfund receivable loan. (IIR)

**ADVANCE TO "A" FUND**—An asset account used to record a loan by one fund to another fund in the same governmental unit. It is recommended that separate accounts be maintained for each interfund receivable loan. (IIR)

**ADVANCED ADULT EDUCATION PROGRAMS**—Learning experiences designed to develop the knowledge, skills, appreciations, attitudes, and behavioral characteristics considered to be needed by adults who, having completed or interrupted formal schooling, have accepted adult roles and responsibilities and are preparing for postsecondary careers and/or postsecondary education programs. (IIR-IVR)

**ADVANCED PLACEMENT COURSE**—A course intended to provide upper-grade secondary school pupils with college-level instruction to enable them, frequently upon the successful completion of an examination, to bypass the usual initial college course in this subject-matter area and begin their college work with a more advanced course and possibly with some college credit. (VI)

**ADVANCED PLACEMENT TEST**—An examination to measure the achievement of a student in a subject-matter area which may qualify him to bypass the usual initial college course in this area and begin his college work with a more advanced course and possibly with some college credit. (VR)

**ADVANCEMENT ACCOUNTS**—See **REVOLVING FUND**.

**ADVERTISING AND SALES PROMOTION** (subject matter)—See appendix, p. 152.

**ADVERTISING SERVICES** (subject matter)—See appendix, p. 163.

**ADVISORY COUNCIL**—A group of persons appointed under legislative or regulatory authority, to provide advice, consultation, or counsel in one or more areas of concern. Such council may be temporary—to accomplish a specific preconceived purpose—or it may be of a standing or permanent nature. (VI–VII)

**AGE AS OF SEPTEMBER 1**—As used in student records, age at last birthday on or prior to September 1. Age may be recorded and reported by years, i.e., an official school age reported as 8 years means that the child has reached his eighth birthday on or prior to September 1, but has not reached his ninth birthday. Age also may be recorded and reported by years and months, as of September 1, or by birth date. Age may be verified by a document such as a birth certificate, parent's affidavit, hospital certificate, age certificate, entry in family Bible, baptismal certificate, passport, and previously verified school record. (I–V–VR)

**AGE CERTIFICATE**—A legal statement from a bureau of vital statistics or similar agency certifying the date of birth of an individual. (V) *See also* BIRTH CERTIFICATE.

**AGE-GRADE DISTRIBUTION**—The number or percentage of students of each age in each grade, usually presented in an age-grade distribution table. (V, VR)

**AGE OF COMPULSORY SCHOOL ATTENDANCE**—*See* COMPULSORY SCHOOL ATTENDANCE AGE.

**AGE-SPECIFIC BIRTH RATE**—Births during a specific calendar year to women of a given age, divided by the midyear number of women of that age, and the result multiplied by 1,000. (Unpublished)

**AGE-SPECIFIC DEATH RATE**—Deaths during a given calendar year of persons of a given age divided by the midyear number of persons of that age, and the result multiplied by 1,000. (Unpublished)

**AGENT**—One who represents, acts for, and accounts to another. The powers of a general agent are broad. He initiates transactions in the name of his principal and carries on operations within a large discretionary area. His functions often resemble those of a general manager. A special agent, on the other hand, is restricted to the performance of a single act or the conduct of a single transaction. (IIR)

**AGGREGATE DAYS ABSENCE**—The sum of the days

of absence of all students when school is in session during a given reporting period. Only days on which the students are under the guidance and direction of teachers should be considered as days in session. (I–V, VR) *See also* DAY IN SESSION.

**AGGREGATE DAYS ATTENDANCE**—The sum of the days present (actually attended) of all students when school is in session during a given reporting period. Only days on which the students are under the guidance and direction of teachers should be considered as days in session. (I, II, IV, V, VII, IIR, IVR, VR) *See also* DAY IN SESSION and DAY OF ATTENDANCE.

**AGGREGATE DAYS MEMBERSHIP**—The sum of the days present and absent of all students when school is in session during a given reporting period. Only days on which the students are under the guidance and direction of teachers should be considered as days in session. (I, II–IV, V, IIR, IVR, VR) *See also* DAY IN SESSION and MEMBERSHIP.

**AGRICULTURAL ACTIVITIES**—As defined for Federal compensatory education programs, a sequence of activities ranging from soil preparation through and including the storage, canning, or freezing of cultivated crops, and activities on farms and ranches related to producing and processing milk, poultry, livestock, and fish. Operations involved in forest nurseries and fish farms are considered to be agricultural activities. The cutting, transportation, and sawing of timber are not considered agricultural activities, nor are the catching and processing of fish from streams and the ocean. (VR)

**AGRICULTURAL MECHANICS** (subject matter)—*See* appendix, p. 143.

**AGRICULTURAL PRODUCTION** (subject matter)—*See* appendix, p. 140.

**AGRICULTURAL PRODUCTS** (subject matter)—*See* appendix, p. 144.

**AGRICULTURAL-RELATED TECHNOLOGY** (subject matter)—*See* appendix, p. 250.

**AGRICULTURAL RESOURCES (CONSERVATION, UTILIZATION, AND SERVICES)** (subject matter)—*See* appendix, p. 146.

**AGRICULTURAL SUPPLIES/SERVICES** (subject matter)—See appendix, p. 143.

**AGRICULTURE** (subject matter)—See appendix, p. 139.

**AIR CONDITIONING** (subject matter)—See appendix, p. 253.

**AIR FORCE JUNIOR ROTC** (subject matter)—See appendix, p. 287.

**ALEUT**—A member of a cultural group of Oriental origins living primarily in the Aleutian Islands and part of the Alaska peninsula. (VR)

**ALGEBRA** (subject matter)—See appendix, p. 208.

**ALGEBRA AND TRIGONOMETRY (INTEGRATED)** (subject matter)—See appendix, p. 211.

**ALIEN**—A foreign-born resident of the United States who does not possess the privileges of a citizen of the United States. (IV)

**ALIEN STUDENT (F-1 CLASSIFICATION)**—A person admitted to the United States solely for the purpose of study. (VR)

**ALLOT**—To divide an appropriation into amounts for certain periods or for specific purposes. (II-IIB-IIR)

**ALLOTMENT**—The amount allotted for a certain period or purpose. (II-IIB-IIR)

**ALLOTMENT LEDGER**—A subsidiary ledger which contains an account for each allotment showing the amount allotted, expenditures, encumbrances, the net balance, and other related information. (II-IIB-IIR) See also APPROPRIATION LEDGER.

**ALTERATION OF A BUILDING**—Minor changes made internally that do not involve major structural changes. (III)

**AMORTIZATION OF DEBT**—(a) Gradual payment of an amount owed according to a specified schedule of times and amounts. (b) Provision for paying a debt by means of a Sinking Fund. (II, IIR)

**AMOUNT AVAILABLE IN DEBT SERVICE FUNDS**—An account in the General Long-Term Debt group of

accounts which designates the amount of assets available in a Debt Service Fund for the retirement of general obligation term bonds. (IIR)

**AMOUNT TO BE PROVIDED FOR PAYMENT OF BONDS**—An account in the General Long-Term Debt group of accounts which represents the amount to be provided from taxes or other general revenue to retire outstanding general obligation term bonds. (IIR)

**ANALYST ASSIGNMENT**—An assignment (e.g., a systems analyst, budget analyst, statistical analyst, or psychological analyst) to examine, evaluate, and make recommendations in such areas as cost, systems, curriculum, or other educational sectors. (IVR)

**ANCILLARY SERVICES**—The supportive activities and resources necessary for the efficient achievement of the objectives of an organization or institution. (Unpublished IX)

**ANDRAGOGY**—The art and science of teaching adults and of adult learning in a climate where the adult is given primary consideration; contrasted with pedagogy. (Unpublished IX)

**ANECDOTAL RECORD**—Notes describing exactly what a student said or did in specific situations. When accumulated, anecdotal records may yield a picture of the student's developing behavior patterns, interests, attitudes, strengths, and problems. (VR)

**ANNUAL CURRENT EXPENDITURES PER STUDENT IN ADA**—The annual current expenditures divided by the average daily attendance for the year. (V-VR) See also CURRENT EXPENDITURES and CURRENT EXPENDITURES PER STUDENT.

**ANNUAL CURRENT EXPENDITURES PER STUDENT IN ADM**—The annual current expenditures divided by the average daily membership for the year. (V-VR) See also CURRENT EXPENDITURES and CURRENT EXPENDITURES PER STUDENT.

**ANNUAL LEAVE**—Leave which may be taken by the staff member during the school year through authorization without loss of all pay or personnel benefits. Annual leave is exclusive of sick leave. Some or all accumulated annual leave may or may not be carried forward from one school year to the next, depending upon local system regulation. (IV, IVR)

**ANNUAL WITHDRAWAL RATE**—The total number of times students withdraw from school during a given regular school term, divided by the number of different students in active membership status during the term, expressed as a percentage. (V, VR) *See also* ACTIVE MEMBERSHIP STATUS.

**ANTHROPOLOGY** (subject matter)—*See* appendix, p. 237.

**APPARATUS**—Movable equipment items, without complex combinations of parts, that are used to transmit, modify, or measure energy or matter in some form. (III, VII)

**APPAREL AND ACCESSORIES** (subject matter)—*See* appendix, p. 164.

**APPLIANCE REPAIR** (subject matter)—*See* appendix, p. 253.

**APPLIED MATHEMATICS** (subject matter)—*See* appendix, p. 211.

**APPLIED RESEARCH**—The type of research activity concerned with specific problems for which immediately applicable findings are sought. This activity may represent the application of knowledge derived from basic research or may involve testing alternative practices in the school system, school, or classroom. When brought to bear on problems of curriculum and instruction, this type of research is conducted to solve immediate practical problems related to the content, resources, and/or processes of instruction and learning. For administration and management, applied research might be used to help solve problems such as those associated with coordinated purchasing and warehousing, space utilization, maintenance schedules, transportation routes, and useful life of equipment. (VI)

**APPORTIONMENT**—*See* ALLOTMENT.

**APPRAISAL**—The act of making an estimate of value, particularly of the value of property, by systematic procedures that include physical examination, pricing, and often engineering estimates. Also, the value established by estimating. (III, VII, IIR)

**APPRAISED VALUE**—The value established by appraisal. (III, IIR) *See also* APPRAISAL.

**APPRECIATION**—An increase in the value of property; the excess of the present value of a given piece of property over its original cost. (III)

**APPRENTICE**—A worker who is learning a recognized occupation in accordance with a written apprentice-training contract between him and his employer or employers which provides for a given period of planned work experience through employment on the job, supplemented by appropriate related instruction, and with other specified provisions of the arrangement. (VI, VR)

**APPRENTICESHIP**—The training through which a staff member has learned or is learning a recognized trade by means of on-the-job work experience and concurrent related instruction on the basis of contractual agreement or the laws of the State for registering apprenticeship programs. (IV) *See also* INTERN.

**APPRENTICESHIP PROGRAM**—A program of studies of occupational preparation for skilled trades as authorized by State and Federal legislation and usually conducted under the auspices of a local joint apprenticeship committee representing labor, management, and the school. (VI)

**APPRENTICESHIP TRAINING**—An organized system for providing young people with the manipulative skills and technical or theoretical knowledge needed for competent performance in skilled occupations. The program usually involves cooperation among schools, labor, and management, since apprentices learn the skills of their craft through on-the-job work experiences, and the related theoretical information through classroom instruction. The minimum terms and conditions of apprenticeship are regulated by State and local statutes or agreements. (VI)

**APPROPRIATION**—An authorization granted by a legislative body to make expenditures and to incur obligations for specific purposes. (II-IIB-VII-IIR)

**APPROPRIATION AND EXPENDITURE LEDGER**—The ledger containing ledger sheets or cards for each account for which funds are appropriated and in which funds are expended. (IIB)

**APPROPRIATION BALANCE**—*See* UNENCUMBERED BALANCE OF APPROPRIATION OR ALLOTMENT and UNEXPENDED BALANCE OF APPROPRIATION OR ALLOTMENT.



**APPROPRIATION EXPENDITURE**—An expenditure chargeable to an appropriation. (II-IIB-IIR)

**APPROPRIATION LEDGER**—A ledger containing an account with each appropriation. Each account usually shows the amount originally appropriated, transfers to or from the appropriation, amount charged against the appropriation, the encumbrances, the net balance, and other related information. If allotments are made and a separate ledger is maintained for them, each account usually shows the amount appropriated, transfers to or from the appropriation, the amount allotted, and the unallotted balance. (II, IIR) *See also* ALLOTMENT LEDGER.

**APPROPRIATIONS RECEIVED FROM LOCAL GOVERNMENTAL UNITS OTHER THAN LEA**—Money received from the appropriations of another local governmental unit. The LEA is not the final authority, within legal limits, in determining the amount of money to be received, and the money is raised by taxes, or other means which are not earmarked for school purposes. (IIR)

**APPROVAL**—The official act of the State department of education, or another recognized agency having official authority, certifying that a unit of organization complies with the legal requirements or prescribed standards for the operation of such units. (VI)

**ARCHITECT**—A staff member, performing assigned professional services in connection with designing and preparing specifications for new construction, rehabilitating or altering existing buildings, developing landscaping, or acting as professional adviser on architectural matters. (IV)

**ARCHITECT ASSIGNMENT**—An assignment to a staff member who is licensed as an architect to perform activities such as designing and preparing plans and specifications for the construction, remodeling, or repair of buildings and facilities and overseeing construction to ensure compliance with plans and specifications. (IV-IVR)

**ARCHITECTURE AND ENGINEERING**—Architectural and engineering activities related to Land Acquisition and Improvement and Building Acquisition, Construction, and Improvements. (IIR)

**ARCHITECTURE AND ENGINEERING SERVICES**—Activities of architects and engineers related to

land acquisition and improvement and improvements to buildings. (IVR)

**AREA, ATTENDANCE**—*See* ATTENDANCE AREA.

**AREA, BUILDING**—*See* BUILDING AREA.

**AREA, CIRCULATION**—*See* CIRCULATION AREA.

**AREA, DEVELOPED**—*See* DEVELOPED AREA.

**AREA, FLOOR**—*See* FLOOR AREA.

**AREA, FUNCTIONAL**—*See* FUNCTIONAL AREA.

**AREA, GROSS FLOOR**—*See* GROSS FLOOR AREA.

**AREA, GUIDANCE**—*See* GUIDANCE AREA.

**AREA, HEALTH SERVICE**—*See* HEALTH SERVICE AREA.

**AREA, INSTRUCTION**—*See* INSTRUCTION AREA.

**AREA, INSTRUCTION SERVICE**—*See* INSTRUCTION SERVICE AREA.

**AREA, LABOR MARKET**—*See* LABOR MARKET AREA.

**AREA, PROGRAM**—*See* PROGRAM AREA.

**AREA, PROJECT**—*See* PROJECT AREA.

**AREA, SCHOOL ATTENDANCE**—*See* SCHOOL ATTENDANCE AREA.

**AREA, SERVICE**—*See* SERVICE AREA.

**AREA, STANDARD METROPOLITAN STATISTICAL**—*See* STANDARD METROPOLITAN STATISTICAL AREA.

**AREA, STATE ECONOMIC**—*See* STATE ECONOMIC AREA.

**AREA, STUDENT COMMONS**—*See* STUDENT COMMONS AREA.

**AREA, SUBJECT-MATTER**—*See* SUBJECT-MATTER AREA.

**AREA, TRADE**—*See* TRADE AREA.

**AREA; UNDERDEVELOPED**—See **UNDERDEVELOPED AREA**.

**AREA, URBANIZED**—See **URBANIZED AREA**.

**AREA OF A BUILDING**—The sum of the areas at each floor level included within the principal outside faces of exterior walls, neglecting architectural setbacks or projections.

Include all stories or areas which have floor surface with clear standing head room (6 feet 6 inches) regardless of their use.

Where a ground level or intermediate story, or part thereof, is left unenclosed, consider the gross area of the unenclosed story as the projected area of the story above.

Exclude all unroofed areas and unenclosed roofed-over spaces.

Include mezzanines, balconies, and library stack floors only to the extent of their actual floor area; do not include unenclosed areas under the first floor.

Unenclosed roofed areas which have been included in original cost contracts can be excluded on a computed or estimated basis for the development of comparative data of gross building areas and costs.

The area of passageways enclosed with similar type and quality of construction as the building proper, and of tunnels with clear standing head room of at least 6 feet 6 inches, are included in the gross area of a building. The area of covered passageways which are not enclosed with similar type and quality of construction as the building proper are excluded from the gross building area. (III)

**AREA OF A SCHOOL SITE**—The area of a school site, expressed in acres to the nearest tenth. It consists of the total development and undeveloped acreage serving a school, including areas occupied by buildings, walks, drives, parking facilities, and other improvements to site. If a school uses more than one piece of land, the area of the site is the sum of the areas of the separate pieces. (III)

**AREA OF AN INTERIOR SPACE**—The total area measured between the principal wall faces at or near floor level, plus wall case or alcove spaces, or both,

opening into and designed to serve the activity carried on in the area, exclusive of areas otherwise included as construction. (III)

**AREA OF RESPONSIBILITY**—A subdivision of a Service Area consisting of activities which, regardless of their nature, have a common purpose directly related to the operational objective of the Service Area. (IV, IIR, IVR)

**AREA SCHOOL**—A public school which has been approved to provide instruction in a specific instructional area to residents of a State, a county, a major city, or another designated geographic area usually larger than one local basic administrative unit. (VI)

**AREA STUDIES (MULTIDISCIPLINARY)** (subject matter)—See appendix, p. 238.

**AREA VOCATIONAL SCHOOL**—A public school which has been approved by the State board for vocational education to provide instruction in the occupations (other than professional occupations) to residents of the State, a county, a major city, or another designated geographic area usually larger than one local basic administrative unit. (IV, V-VI, VR)

**ARMY JUNIOR ROTC** (subject matter)—See appendix, p. 282.

**ART** (subject matter)—See appendix, p. 147.

**ART HISTORY AND THEORY** (subject matter)—See appendix, p. 147.

**ART STUDIO** (subject matter)—See appendix, p. 148.

**ARTERIALS**—The second rank in the classification of streets. Arterials are used only for the movement of vehicles, with limited vehicular access to adjoining properties. Ideally, traffic flow is interrupted only at street intersections. (Unpublished)

**ASSESSED PROPERTY VALUATION**—Assessed valuation determined by the appropriate local government agency for taxation purposes. Assessment criteria vary from State to State, but commonly are based on a percentage of presumed full market value. (Unpublished)

**ASSETS**—The things of value an LEA owns. (II-IIB-VII-IIR) See also **FIXED ASSETS**.

ASSIGNMENT—A specific group of activities for which a staff member has been given responsibility. (IV-IVR)

ASSIGNMENT, ACCOUNTING—*See* ACCOUNTING ASSIGNMENT.

ASSIGNMENT, ADMINISTRATIVE ASSISTANT—*See* ADMINISTRATIVE ASSISTANT ASSIGNMENT.

ASSIGNMENT, ADMINISTRATIVE INTERN—*See* ADMINISTRATIVE INTERN ASSIGNMENT.

ASSIGNMENT, ANALYST—*See* ANALYST ASSIGNMENT.

ASSIGNMENT, ARCHITECT OR ENGINEER—*See* ARCHITECT OR ENGINEER ASSIGNMENT.

ASSIGNMENT, ASSISTANT PRINCIPAL—*See* ASSISTANT PRINCIPAL ASSIGNMENT.

ASSIGNMENT, ASSISTANT SCHOOL DIRECTION AND MANAGEMENT—*See* ASSISTANT SCHOOL DIRECTION AND MANAGEMENT ASSIGNMENT.

ASSIGNMENT, ATTENDANCE—*See* ATTENDANCE ASSIGNMENT.

ASSIGNMENT, ATTENDANCE OFFICER—*See* ATTENDANCE OFFICER ASSIGNMENT.

ASSIGNMENT, ATTORNEY—*See* ATTORNEY ASSIGNMENT.

ASSIGNMENT, BOARD OF EDUCATION MEMBER—*See* BOARD OF EDUCATION MEMBER ASSIGNMENT.

ASSIGNMENT, BOOKKEEPING—*See* BOOKKEEPING ASSIGNMENT.

ASSIGNMENT, CARPENTERING—*See* CARPENTERING ASSIGNMENT.

ASSIGNMENT, CHIEF EXECUTIVE—*See* CHIEF EXECUTIVE ASSIGNMENT.

ASSIGNMENT, CLASSROOM TEACHING—*See* CLASSROOM TEACHING ASSIGNMENT.

ASSIGNMENT, CLERICAL—*See* CLERICAL ASSIGNMENT.

ASSIGNMENT, COMPUTER OPERATING—*See* COMPUTER OPERATING ASSIGNMENT.

ASSIGNMENT, COOKING OR SERVING—*See* COOKING OR SERVING ASSIGNMENT.

ASSIGNMENT, COUNSELING—*See* COUNSELING ASSIGNMENT.

ASSIGNMENT, CRAFTS AND TRADES APPRENTICESHIP—*See* CRAFTS AND TRADES APPRENTICESHIP ASSIGNMENT.

ASSIGNMENT, CURRICULUM SPECIALIST—*See* CURRICULUM SPECIALIST ASSIGNMENT.

ASSIGNMENT, CUSTODIAN—*See* CUSTODIAN ASSIGNMENT.

ASSIGNMENT, DENTAL HYGIENIST—*See* DENTAL HYGIENIST ASSIGNMENT.

ASSIGNMENT, DENTIST—*See* DENTIST ASSIGNMENT.

ASSIGNMENT, DIETITIAN/NUTRITIONIST—*See* DIETITIAN/NUTRITIONIST ASSIGNMENT.

ASSIGNMENT, DIRECTION AND MANAGEMENT (Other Than School Direction and Management)—*See* DIRECTION AND MANAGEMENT ASSIGNMENT (Other Than School Direction and Management).

ASSIGNMENT, DISPATCHING—*See* DISPATCHING ASSIGNMENT.

ASSIGNMENT, EDITING—*See* EDITING ASSIGNMENT.

ASSIGNMENT, ELECTRICIAN—*See* ELECTRICIAN ASSIGNMENT.

ASSIGNMENT, ELEVATOR OPERATING—*See* ELEVATOR OPERATING ASSIGNMENT.

ASSIGNMENT, EVALUATING—*See* EVALUATING ASSIGNMENT.

ASSIGNMENT, FOOD SERVICE—*See* FOOD SERVICE ASSIGNMENT.

ASSIGNMENT, FOREMAN—*See* FOREMAN ASSIGNMENT.

- ASSIGNMENT, FULL-TIME--See FULL-TIME ASSIGNMENT.
- ASSIGNMENT, FULL-TIME, EQUIVALENCY--See FULL-TIME EQUIVALENCY ASSIGNMENT.
- ASSIGNMENT, GENERAL MAINTENANCE--See GENERAL MAINTENANCE ASSIGNMENT.
- ASSIGNMENT, GRAPHIC ARTS--See GRAPHIC ARTS ASSIGNMENT.
- ASSIGNMENT, GROUNDSKEEPING--See GROUNDSKEEPING ASSIGNMENT.
- ASSIGNMENT, GUARD/WATCHMAN--See GUARD/WATCHMAN ASSIGNMENT.
- ASSIGNMENT, INSPECTOR--See INSPECTOR ASSIGNMENT.
- ASSIGNMENT, LABORER--See LABORER ASSIGNMENT.
- ASSIGNMENT, LEGAL--See LEGAL ASSIGNMENT.
- ASSIGNMENT, LESS-THAN-FULL-TIME--See LESS-THAN-FULL-TIME ASSIGNMENT.
- ASSIGNMENT, LIBRARIAN--See LIBRARIAN ASSIGNMENT.
- ASSIGNMENT, LIBRARIAN/MEDIA--See LIBRARIAN/MEDIA ASSIGNMENT.
- ASSIGNMENT, MASONING--See MASONING ASSIGNMENT.
- ASSIGNMENT, MECHANIC--See MECHANIC ASSIGNMENT.
- ASSIGNMENT, MESSENGER--See MESSENGER ASSIGNMENT.
- ASSIGNMENT, MONITORING--See MONITORING ASSIGNMENT.
- ASSIGNMENT, NEGOTIATING--See NEGOTIATING ASSIGNMENT.
- ASSIGNMENT, NONCOURSE INSTRUCTIONAL--See NONCOURSE INSTRUCTIONAL ASSIGNMENT.
- ASSIGNMENT, NURSE--See NURSE ASSIGNMENT.
- ASSIGNMENT, OMBUDSMAN--See OMBUDSMAN ASSIGNMENT.
- ASSIGNMENT, OPHTHALMOLOGIST--See OPHTHALMOLOGIST ASSIGNMENT.
- ASSIGNMENT, OPTOMETRIST--See OPTOMETRIST ASSIGNMENT.
- ASSIGNMENT, PERSONNEL--See PERSONNEL ASSIGNMENT.
- ASSIGNMENT, PHYSICIAN--See PHYSICIAN ASSIGNMENT.
- ASSIGNMENT, PLANNING--See PLANNING ASSIGNMENT.
- ASSIGNMENT, PLASTERING--See PLASTERING ASSIGNMENT.
- ASSIGNMENT, PLUMBING--See PLUMBING ASSIGNMENT.
- ASSIGNMENT, PRACTICAL NURSING--See PRACTICAL NURSING ASSIGNMENT.
- ASSIGNMENT, PRINCIPAL--See PRINCIPAL ASSIGNMENT.
- ASSIGNMENT, PROGRAMING--See PROGRAMING ASSIGNMENT.
- ASSIGNMENT, PSYCHIATRIST--See PSYCHIATRIST ASSIGNMENT.
- ASSIGNMENT, PSYCHOLOGIST--See PSYCHOLOGIST ASSIGNMENT.
- ASSIGNMENT, PSYCHOMETRIST--See PSYCHOMETRIST ASSIGNMENT.
- ASSIGNMENT, PUBLIC/COMMUNITY RELATIONS--See PUBLIC/COMMUNITY RELATIONS ASSIGNMENT.
- ASSIGNMENT, PURCHASING AGENT--See PURCHASING AGENT ASSIGNMENT.
- ASSIGNMENT, RECORDS AND MANAGING--See RECORDS AND MANAGING ASSIGNMENT.

ASSIGNMENT, REGISTERED NURSING—*See* REGISTERED NURSING ASSIGNMENT.

ASSIGNMENT, REGISTRAR—*See* REGISTRAR ASSIGNMENT.

ASSIGNMENT, REMEDIAL SPECIALIST—*See* REMEDIAL SPECIALIST ASSIGNMENT.

ASSIGNMENT, RESEARCH AND DEVELOPMENT—*See* RESEARCH AND DEVELOPMENT ASSIGNMENT.

ASSIGNMENT, SCHOOL DIRECTION AND MANAGEMENT—*See* SCHOOL DIRECTION AND MANAGEMENT ASSIGNMENT.

ASSIGNMENT, SCHOOL LIBRARIAN—*See* SCHOOL LIBRARIAN ASSIGNMENT.

ASSIGNMENT, SCOPE OF—*See* SCOPE OF ASSIGNMENT.

ASSIGNMENT, SOCIAL WORK—*See* SOCIAL WORK ASSIGNMENT.

ASSIGNMENT, STATISTICIAN—*See* STATISTICIAN ASSIGNMENT.

ASSIGNMENT, STORES HANDLING—*See* STORES HANDLING ASSIGNMENT.

ASSIGNMENT, SUPERINTENDENT—*See* SUPERINTENDENT ASSIGNMENT.

ASSIGNMENT, SUPERVISING/MANAGING/DIRECTING—*See* SUPERVISING/MANAGING/DIRECTING ASSIGNMENT.

ASSIGNMENT, SUPERVISION—*See* SUPERVISION ASSIGNMENT.

ASSIGNMENT, SYSTEMWIDE—*See* SYSTEMWIDE ASSIGNMENT.

ASSIGNMENT, TAX ASSESSING/COLLECTING—*See* TAX ASSESSING/COLLECTING ASSIGNMENT.

ASSIGNMENT, TEACHER AIDE—*See* TEACHER AIDE ASSIGNMENT.

ASSIGNMENT, TEACHING AIDE—*See* TEACHING AIDE ASSIGNMENT.

ASSIGNMENT, TEACHING—*See* TEACHING ASSIGNMENT.

ASSIGNMENT, TEACHING ASSISTANT—*See* TEACHING ASSISTANT ASSIGNMENT.

ASSIGNMENT, TEACHING INTERN—*See* TEACHING INTERN ASSIGNMENT.

ASSIGNMENT, TESTING—*See* TESTING ASSIGNMENT.

ASSIGNMENT, THERAPIST—*See* THERAPIST ASSIGNMENT.

ASSIGNMENT, VEHICLE OPERATING—*See* VEHICLE OPERATING ASSIGNMENT.

ASSISTANT/ASSOCIATE, OR DEPUTY SUPERINTENDENT—A staff member performing assigned, professional, administrative activities assisting the chief executive officer of the school administrative unit in the development of general administrative policies and in conducting the general administration of the school administrative unit. (IV)

ASSISTANT/DEPUTY/ASSOCIATE SUPERINTENDENT ASSIGNMENT—An assignment to a staff member (e.g., an assistant, deputy, or associate superintendent or his assistant) to perform high level, system-wide executive management functions in a local education agency. (IIR, IVR)

ASSISTANT PRINCIPAL ASSIGNMENT—An assignment to a staff member (e.g., an assistant, deputy, or associate principal) to perform high level executive management functions in an individual school, group of schools, or unit(s) of an LEA. (IIR, IVR)

ASSISTANT SCHOOL DIRECTION AND MANAGEMENT ASSIGNMENT—An assignment to a staff member to perform the professional activities of assisting the head of a school in performing the activities of directing and managing a school. (IV)

ASSOCIATE DEGREE—A degree commonly conferred upon the successful completion of a 2-year program of studies of a junior college or technical institute. (IV, V, VI, IVR)

ASSOCIATE IN APPLIED SCIENCE DEGREE—A degree commonly conferred upon the successful

completion of a 2-year postsecondary program of studies composed of general education, electives, and a major concentration in a chosen technical, semiprofessional, or professional area of study. (VR)

**ASSOCIATE IN ARTS DEGREE**—A degree commonly conferred upon the successful completion of a 2-year postsecondary program of studies composed essentially of courses in the liberal arts. (VR)

**ASSOCIATE IN SCIENCE DEGREE**—A degree commonly conferred upon the successful completion of a 2-year postsecondary program of studies composed of courses in the liberal arts and sciences. (VR)

**ATTENDANCE**—The presence of a student on days when school is in session. A student may be counted present only when he is actually at school or is present at another place at a school activity which is sponsored by the school, is a part of the program of the school, and is personally supervised by a member or members of the school staff. This may include authorized independent study, work-study programs, field trips, athletic contests, music festivals, student conventions, instruction for homebound students, and similar activities when officially authorized under policies of the local school board. It does not include "making up" schoolwork at home, or activities supervised or sponsored by private individuals or groups. (V, VII-VR) See also **DAY OF ATTENDANCE**.

**ATTENDANCE, AGGREGATE DAYS**—See **AGGREGATE DAYS ATTENDANCE**.

**ATTENDANCE, AVERAGE DAILY (ADA)**—See **AVERAGE DAILY ATTENDANCE (ADA)**.

**ATTENDANCE, CERTIFICATE OF**—See **CERTIFICATE OF ATTENDANCE**.

**ATTENDANCE, COMPULSORY SCHOOL**—See **COMPULSORY SCHOOL ATTENDANCE**.

**ATTENDANCE, DAY OF**—See **DAY OF ATTENDANCE**.

**ATTENDANCE, FULL DAY OF**—See **FULL DAY OF ATTENDANCE**.

**ATTENDANCE, HALF DAY OF**—See **HALF DAY OF ATTENDANCE**.

**ATTENDANCE, PERCENTAGE OF**—See **PERCENTAGE OF ATTENDANCE**.

**ATTENDANCE AND SOCIAL WORK SERVICES**—Activities which are designed to improve pupil attendance at school or which attempt to prevent or solve pupil problems involving the home, the school, and the community. (IV-III, IVR) See also **SCHOOL SOCIAL WORK**.

**ATTENDANCE AREA**—The geographic area wherein reside the students normally served by a particular school. (VR)

**ATTENDANCE AREA ANALYSIS**—Detailed study of an attendance area to produce certain desired data which are tabulated and studied to provide background for solving problems of the area. (Unpublished VIII)

**ATTENDANCE ASSIGNMENT**—An assignment to a staff member to perform activities such as enforcing compulsory attendance laws, analyzing causes of nonattendance, identifying patterns of nonattendance for the purpose of improving school attendance. (IV) See also **ATTENDANCE SERVICES; ATTENDANCE AND SOCIAL WORK SERVICES; ATTENDANCE OFFICER; ATTENDANCE OFFICER ASSIGNMENT; and ATTENDANCE PERSONNEL**.

**ATTENDANCE CENTER**—The location where students residing in a given geographic area attend school. (VII, VR)

**ATTENDANCE OFFICER**—A staff member performing assigned activities having as their purpose the early identification of nonattendance of pupils, the analysis of causes of nonattendance, the enforcement of compulsory attendance laws, and the improvement of school attendance. (I-II-IV)

**ATTENDANCE OFFICER ASSIGNMENT**—An assignment to enforce compulsory attendance laws. (III, IVR)

**ATTENDANCE PERSONNEL**—Staff members assigned activities for promoting and improving school attendance of pupils. (I-IV)

**ATTENDANCE REGISTER**—A record containing information such as (a) the names of students who have entered or are expected to enter a class or school; (b) identification information about each student such as

sex, date of birth, and address, and (c) information concerning his entry or reentry, membership, attendance, absence, tardiness, and withdrawal. (V-VR)

**ATTENDANCE SERVICES**—Activities such as prompt identification of patterns of nonattendance, promotion of positive attitudes toward attendance, analysis of causes of nonattendance, early action on problems of nonattendance, and enforcement of compulsory attendance laws. (IV-VI-IVR)

**ATTENDANT**—A general term designating a staff member performing assigned activities to watch over and provide a degree of physical care for school property or pupils. (IV)

**ATTITUDINAL TEST**—An examination to measure the mental and emotional set or pattern of likes and dislikes held by an individual or group, often in relation to considerations such as controversial issues and personal adjustments. (VR)

**ATTORNEY**—A staff member performing assigned professional duties of providing legal counsel and services for the school system. (IV)

**ATTORNEY ASSIGNMENT**—*See* LEGAL ASSIGNMENT.

**ATTRIBUTION**—A procedure for allocating costs, employee time, or property use among several functions, programs, organizational units, or other dimensions, on the basis of the best possible estimate; may be used when objective data are not available for proration. (VII)

**ATYPICAL CHARACTERISTIC**—A characteristic of an individual in a given chronological age group which is markedly different from that of the mean. (V, VI, VR) *See also* EXCEPTIONAL CHILDREN.

**ATYPICAL CONDITION**—A condition of an individual in a given chronological age group which is markedly different from that of the mean. An individual having an atypical condition may reveal one or more atypical characteristics which enable an identification of the condition. (V, VR) *See also* ATYPICAL CHARACTERISTIC.

**ATYPICAL PUPIL**—A pupil revealing a physical, mental, or behavioral characteristic which is markedly different from that of the mean of his chronological

age group. (V, VI) *See also* ATYPICAL CHARACTERISTIC; EXCEPTIONAL CHILDREN; and EXCEPTIONAL PUPILS.

**AUDIOLINGUAL APPROACH**—An approach to language instruction emphasizing that element of language (sound) which is spoken in normal, everyday, conversational interchange as differentiated from language as gesture or as writing. This sometimes is referred to as the "aural-oral" approach. (VI)

**AUDIOLOGIST**—A staff member who is a specialist in communicative disorders including the scientific study and management of speech, hearing, and language disabilities. Primary responsibilities are of a clinical nature which involves diagnostic, evaluative, and therapeutic activities in the area of hearing disabilities. (IV)

**AUDIOLOGIST ASSIGNMENT**—An assignment to provide services such as diagnostic evaluation, habilitative and rehabilitative services, and research related to hearing. (IIR, IVR)

**AUDIOLOGY SERVICES**—Activities organized for the identification of pupils with hearing loss; determination of the range, nature, and degree of hearing function; referral for medical or other professional attention as appropriate to the habilitation of hearing; language habilitation; auditory training, speech reading (lip-reading), and speech conservation as necessary; creation and administration of programs of hearing conservation; and counseling and guidance of pupils, parents, and teachers as appropriate. (VI, IIR, IVR)

**AUDIOMETRIST**—A staff member performing assigned activities of testing the auditory perception of individuals by means of specifically designed electrical or mechanical testing equipment. (IV)

**AUDIOMETRIST ASSIGNMENT**—An assignment to administer audiometric (hearing acuity) screening tests under the supervision of an audiologist or physician (IIR, IVR)

**AUDIOVISUAL AIDS**—Optical, electronic, and other devices—and related supplies—which are designed to enhance learning through the combined senses of hearing and sight, e.g., sound, motion pictures, printed materials, and television. Frequently two or more of these components are combined into electronic distribution systems, some of which incorporate remote or dial access capabilities. (VII, IIR, IVR) *See also* EDUCATIONAL MEDIA.

**AUDIOVISUAL ROOM**—An instruction area designed, or provided with special built-in equipment, for audio-visual material storage, screening, and listening that is separate from the school library and does not serve as an adjunct to other rooms or areas. (III-VI)

**AUDIOVISUAL SERVICES**—Activities such as selecting, preparing, caring for, and making available to members of the instructional staff equipment, films, filmstrips, transparencies, tapes, television programs, and other similar materials, whether maintained separately or as a part of an instructional materials center. Included are activities in the audiovisual center, television studio and related work-study areas, and the services provided by audiovisual personnel. (IV-VI-IIR, IVR)

**AUDIOVISUAL TECHNICIAN**—A staff member performing assigned skilled activities in the use and care of audiovisual equipment and with the techniques of instructional presentation through the use of machines, charts, and other audiovisual equipment and materials. (IV)

**AUDIT**—The examination of records and documents and the securing of other evidence for one or more of the following purposes: (a) determining the propriety of proposed or completed transactions, (b) ascertaining whether all transactions have been recorded, (c) determining whether transactions are accurately recorded in the accounts and in the statements drawn from the accounts. (II-IIB-VII-IIR)

**AUDIT REPORT**—The report prepared by an auditor following a completed audit; it should include: (1) scope of the audit; (2) summary of findings; (3) recommendations; (4) certificate; and (5) financial statements. (IIB)

**AUDIT SERVICES**—Activities pertaining to independent audit services provided to the board of education. (IIR, IVR)

**AUDITED VOUCHER**—A voucher which has been examined and approved for payment. (II, IIR)

**AUDITING ASSIGNMENT**—An assignment to perform activities concerned with examining, verifying, and reporting on the accounting records of the LEA. (IIR, IVR)

**AUDITOR**—A staff member performing the assigned

technical activities of verifying the accuracy and appropriateness of receipts, expenditures, accounts, and accounting statements in accordance with the laws and regulations that are applicable. (IV)

**AUDITORIUM**—An instructional space designed and constructed with a built-in stage, and sloping floor or fixed seating, for use as an assembly center. (III-VI)  
*See also* INSTRUCTION AREA.

**AUDITORIUM-GYMNASIUM**—*See* GYMNASIUM.

**AUDITORY HANDICAP**—An impairment in hearing that adversely affects the performance of an individual. A person identified as having an auditory handicap may be referred to as "hard of hearing" or "deaf," according to the nature and severity of his handicap. (V, VI, VR)

**AUTOMATIC DATA PROCESSING**—The use of machines and devices in the storing of individual items of information in a form by which they may be rapidly and accurately retrieved, processed, and reproduced as single line items, as lists of items, or in desired combinations with other items. (IV-V) *See also* DATA PROCESSING and MACHINE DATA PROCESSING.

**AUTOMOTIVE (subject matter)**—*See* appendix, p. 164.

**AUTOMOTIVE SERVICES (subject matter)**—*See* appendix, p. 254.

**AVERAGE AGE OF STUDENTS**—The total of the ages (expressed in years and months) of the students of a given group divided by the number of students in the group. (V, VR)

**AVERAGE CLASS SIZE**—The total membership of classes of a given type, as of a given date, divided by the number of such classes. (V, VR)

**AVERAGE DAILY ABSENCE**—The aggregate days absence of a given school during a given reporting period divided by the number of days school is in session during this period. Only days on which the students are under the guidance and direction of teachers should be considered as days in session. The average daily absence for groups of schools having varying lengths of terms is the sum of the average daily absences obtained for the individual schools. (V, VR) *See also* AGGREGATE DAYS ABSENCE; DAY IN SESSION; and DAY OF ABSENCE.



**AVERAGE DAILY ATTENDANCE (ADA)**—The aggregate days attendance of a given school during a given reporting period divided by the number of days school is in session during this period. Only days on which the students are under the guidance and direction of teachers should be considered as days in session. The reporting period is generally a given regular school term. The average daily attendance for groups of schools having varying lengths of terms is the sum of the average daily attendances obtained for the individual schools. For purposes of obtaining statistical comparability *only*, student-staff ratios involving kindergarten and prekindergarten students attending a half-day session are computed as though these students are in attendance for a half day. The average daily attendance of children and youth residing in institutions for neglected or delinquent children or in adult correctional institutions should be reported according to provisions of the applicable legislation. (I, II, III-IV, V, VI-VII-III, IVR-VR)

**AVERAGE DAILY MEMBERSHIP (ADM)**—The aggregate days membership of a given school during a given reporting period divided by the number of days school is in session during this period. Only days on which the students are under the guidance and direction of teachers should be considered as days in session. The reporting period is generally a given regular school term. The average daily membership for groups of schools having varying lengths of terms is the sum of the average daily memberships obtained for the individual schools. For purposes of obtaining statistical comparability *only*, student-staff ratios involving kindergarten and prekindergarten students attending a half-day session are computed as though these students are in membership for a half day. (I, II, III-IV-V, VI, VII-III, IVR-VR)

**AVERAGE DAILY MEMBERSHIP OF STUDENTS TRANSPORTED**—The aggregate days membership during a given reporting period of students transported to and from school divided by the number of days school is in session during this period. (VR)

**AVERAGE DAILY NUMBER OF STUDENTS PARTICIPATING IN NATIONAL SCHOOL LUNCH AND/OR BREAKFAST PROGRAMS**—The total number of servings per month for elementary and secondary school students in national lunch and/or breakfast programs, divided by the number of days the meal is served. (VR)

**AVERAGE LENGTH OF TERM IN DAYS**—For the State as a whole, the aggregate days attendance for the State divided by the average daily attendance for the State. (I)

**AVERAGE MEMBERSHIP PER SCHOOL**—The total membership of schools in a reporting unit, as of a given date, divided by the number of schools in the unit. (V, VI, VR)

**AVERAGE NUMBER OF CHILDREN PER ATTENDANCE AREA**—The total number of children of school age in an administrative unit divided by the number of attendance areas within the administrative unit. (V, VI, VR)

**AVERAGE NUMBER OF CHILDREN PER SCHOOL DISTRICT**—The total number of children of school age in a given State (or intermediate unit) divided by the number of local basic administrative units within the State (or intermediate unit). (V, VI, VR)

**AVERAGE NUMBER OF PUPILS SERVED LUNCH PER DAY**—The total number of pupils served lunch during a given reporting period divided by the number of days on which lunch was served. (V)

**AVERAGE NUMBER OF STUDENTS TRANSPORTED**—The aggregate number of days individual students are transported between home and school during a given reporting period divided by the number of days transportation is provided. (VR)

**AVERAGE TRANSPORTATION COST PER STUDENT TRANSPORTED**—The annual current expenditures for student transportation divided by the average daily membership of students transported. (V, VR)

**AVERAGE UNIT COST OF EQUIPMENT**—At any given time, the total cost of an equipment group being accounted for under group control divided by the number of individual equipment items in the group. (III) *See also* GROUP CONTROL.

**AVIATION OCCUPATIONS** (subject matter)—*See* appendix, p. 254.

**AVOCATION**—A subordinate activity or hobby practiced by the staff member in which the staff member has an enduring interest. (IV)

**AVOCATIONAL INTERESTS AND ABILITIES**—A

description of hobbies and other avocational interests and abilities of the staff member that may enhance the individual's performance or quality as a staff member. Singing, art, instrumental music, writing, public speaking, or youth work are examples of record entry information which may be included in this category. (IV)

## B

**BACHELOR'S DEGREE**—A degree usually conferred upon the successful completion of a 4-year college program of studies. (IV, V, VI, IVR)

**BALANCE (curriculum)**—A purposeful variety in aims and objectives for pupils supported by an overall plan for instruction having flexibility in required and optional areas of content to be studied and diversity in types of learning experiences. (VI)

**BALANCE SHEET**—A formal statement of assets, liabilities, and fund balance as of a specific date. (II-IB-VII, IIR)

**BALANCE SHEET ACCOUNTS**—See **BALANCE SHEET**.

**BANK RECONCILIATION**—A statement which is normally prepared at the end of the month and at the end of the year and which reconciles the bank balance as shown on the books with the bank balance as reflected on the bank statement. (IIB)

**BAPTISMAL OR CHURCH CERTIFICATE**—A form issued by a church certifying the baptism of a child. This form records the date of birth and often is acceptable as verification for this date. (IV, V-VR)

**BASAL READER PROGRAM (subject matter)**—See appendix, p. 173.

**BASE MAP**—A map that shows the location of important geographic and economic features of an area, and is used to plot the distribution of social phenomena, such as income levels. (Unpublished VIII)

**BASEMENT**—Any floor that is below grade level on all sides and has clear standing head room of at least 6 feet 6 inches. "Below grade level" means that if the horizontal plane of the floor were to be extended on the side in question, all or part of the land within 20

feet of the building would be above the plane. (III) See also **FIRST FLOOR**.

**BASIC EDUCATION**—A term frequently used in referring to education emphasizing literacy in language, mathematics, natural sciences, and history and related social sciences. (VI) See also **ADULT BASIC EDUCATION**.

**BASIC INPUT COSTS**—That set of costs essential to the production of a final product, commonly used in determination of value added by manufacturing. Such costs include labor, overhead, utilities, acquisition of materials necessary in the production process, cost of transportation of such materials to the facility, and others. (Unpublished VIII)

**BASIC RESEARCH**—The type of research activity, primarily directed to the development and evaluation of theory, in which immediate applicability of findings is not a major concern. This type of research activity is primarily concerned with the discovery of new knowledge. (VI)

**BASIC SKILLS TEST**—An examination measuring the ability of a person to use fundamental reading and computational skills which are the basis of later learning and achievement. (VR)

**BEGINNING READING (subject matter)**—See appendix, p. 173.

**BEHAVIOR PATTERN**—A special grouping or mosaic of responses of a student that, in the judgment of a trained observer, possesses some intrinsic unity. The responses obtained are considered to result from inner psychological needs; as such they are more or less automatic, with the student having little control over them. (VR)

**BEHAVIORAL SCIENCES**—Any system of studies and/or processes concerned with the way in which humans (and some animals) act, singly or in groups, autonomously or in response to outside stimuli, and of ways in which such actions can be understood, influenced, predicted, and changed. (Unpublished IX)

**BENCH, DESK, OR FLOOR MACHINERY AND APPARATUS**—Machinery and apparatus that, under normal operation, remain stationary on a bench, desk, or floor during operation. Examples of equipment designated by this title are typewriters, duplicators,

dishwashing machines, clothes dryers, drill presses, metal and wood turning lathes, stoves, coffee urns, portable projection screens, barographs, and electric tube testers. (III) *See also* APPARATUS and MACHINERY.

**BETTERMENTS**—*See* IMPROVEMENTS TO SITE.

**BIOLOGICAL SCIENCES (INCLUDING GENERAL BIOLOGY)** (subject matter)—*See* appendix, p. 225.

**BIRTH CERTIFICATE**—A written statement or form issued by an office of vital statistics verifying the name and date of birth of the child as reported by the physician attending at the birth, or a statement in written form issued by the physician attending the child's birth, recording the child's name and date of birth, and acceptable as a birth certificate by the political subdivision where issued. (IV, V-VR)

**BLIGHT**—Substandard structures and neighborhoods. By substandard the following is implied. (1) relatively few dwellings in the neighborhood are decent, safe, and sanitary; (2) there is a lack of adequate and accessible transportation, and (3) satisfactory community facilities and improvements are lacking. (Unpublished VIII)

**BLIND**—Individuals who are sightless or who have such limited vision that they must rely on hearing and touch as their chief means of learning. (VR)

**BLOCK**—The smallest unit, a city block, for which census data are tabulated in a standard metropolitan statistical area. (Unpublished VIII)

**BLOCK GROUPS**—Collective representation from a small area of a school district, often a square block or a linear block area, used to gather information from or to give information to that area of the community. (Unpublished VIII)

**BLOCK PARENT**—A parent or parents in the community designated as the person from whom children or adults can receive assistance. They may be identified by signs in the window or on the house. (Unpublished VIII)

**BLOCK PLAN**—A system of dividing a school community into blocks for ease of communication. Each block is an area capable of being contacted by a designated person living in the block. (Unpublished VIII)

**BLUE COLLAR WORKER**—A manual worker, one whose work is primarily physical and dealing with things, rather than mental or social. The category includes skilled, semiskilled, and unskilled workers, and includes farm workers as well as factory workers, miners, and construction workers. The term is used to differentiate the manual worker from the "white collar worker." (Unpublished VIII)

**BLUEPRINT READING** (subject matter)—*See* appendix, p. 255.

**BOARD OF EDUCATION**—The elected or appointed body which has been vested with responsibilities for authorizing, financing, and evaluating the educational activities in a given school system, school, or geographic area. Such bodies sometimes are known by terms such as school boards, governing boards, boards of directors, school committees, and school trustees. This definition relates to the general term and encompasses the boards of both public and nonpublic institutions and school systems. (VI-VR) *See also* PUBLIC BOARD OF EDUCATION.

**BOARD OF EDUCATION MEMBER ASSIGNMENT**—An assignment to perform activities as a member of a legally constituted body which has been created and vested with responsibilities for educational activities in a given geographical area. (IIR, IVR)

**BOARD OF EDUCATION SERVICES**—The activities of the elected or appointed body which has been created according to State law and vested with responsibilities for educational activities in a given geographical area. These bodies are sometimes called school boards, governing boards, boards of directors, school committees, school trustees, etc. This service area relates to the general term and covers State boards, intermediate administrative unit boards, and local basic administrative unit boards (IIR, IVR)

**BOARD RESPONSIBILITY**—The area of responsibility consisting of those activities which are not delegated by the governing board of the school system to the chief executive officer and his staff but are retained by the board. (IV)

**BOARD SECRETARY SERVICES**—Activities pertaining to the duties of the secretary (not executive) of the board of education. (IVR)

**BOARD TREASURER SERVICES**—Activities per-

taining to the duties of treasurer of the board of education. (IVR)

**BOARDING SCHOOL**—See RESIDENTIAL SCHOOL.

**BOND**—A written promise, generally under seal, to pay a specified sum of money, called the face value, at a fixed time in the future, called the date of maturity, and carrying interest at a fixed rate, usually payable periodically. The difference between a note and a bond is that the latter usually runs for a longer period of time and requires greater legal formality. (II-IIB-IIR)  
See also REFUNDING BONDS; SERIAL BONDS; SURETY BONDS; and TERM BONDS.

**BOND ATTORNEY**—The attorney who approves the legality of a bond issue, (II, IIR)

**BOND DISCOUNT**—The excess of the face value of a bond over the price for which it is acquired or sold. The price does not include accrued interest at the date of acquisition or sale. (II-JIB-VII, IIR)

**BOND PREMIUM**—The excess of the price at which a bond is acquired or sold, over its face value. The price does not include accrued interest at the date of acquisition or sale. (II-IIB-IIR)

**BOND PROCEEDS RECEIVABLE**—An account used to designate the amount receivable upon sale of bonds. (IIR)

**BOND REGISTER**—A record in which are recorded by number the bonds issued and redeemed, dates of issue and redemption, and principal and interest payments. (IIB)

**BONDED DEBT**—The part of the LEA debt which is covered by outstanding bonds of the LEA. Sometimes called "Funded Debt." (II, III-IIB-IIR)

**BONDS AUTHORIZED—UNISSUED**—Bonds which the LEA can issue without further proceedings other than to direct their sale. The account is included among the resources of the Capital Projects Fund offset by a credit to Appropriations. When the bonds are sold, the account would be credited and Cash debited. An alternative approach is not to show the Bonds Authorized - Unissued account in the balance sheet but merely to call attention to the amount of bonds that have been authorized and not issued in a footnote to the appropriate balance sheet. In this case,

the journal entry at the time bonds are sold would be a debit to Cash for the proceeds and a credit to the revenue account, Sales of Bonds. (IIR)

**BONDS PAYABLE**—The face value of bonds issued and outstanding. (IIR)

**BONUS POINTS**—Additional mark points awarded students in secondary schools and junior colleges for performance in schoolwork of unusual difficulty, e.g., for advanced courses. This does not refer to a system of rewards or "tokens" sometimes used as a teaching technique. (VR)

**BOOK VALUE**—Value as shown by books of account. (II, III, IIR)

**BOOKKEEPER**—A staff member performing assigned activities of keeping a systematic record of financial transactions. (IV)

**BOOKKEEPING, (subject matter)**—See appendix, p. 153.

**BOOKKEEPING ASSIGNMENT**—An assignment to keep a systematic record of accounts or transactions and to prepare statements. (IIR, IVR)

**BOOKSTORE SALES**—Revenues of sales resulting from the operation of a bookstore. Bookstore sales can be part of the distributive education courses offered, pupil-organization sponsored, or an LEA enterprise. Sales may be recorded in separate accounts according to the type of product sold. (IIR)

**BRANCH CAMPUS**—A campus of an educational institution (usually an institution of higher education) which is located in a community different from that of its parent institution and beyond a reasonable commuting distance from the main campus of the parent institution. (VI)

**BUDGET**—A plan of financial operation embodying an estimate of proposed expenditures for a given period or purpose and the proposed means of financing them. The budget usually consists of three parts. The first part contains a message from the budget-making authority together with a summary of the proposed expenditures and the means of financing them. The second part consists of schedules supporting the summary. The schedules show in detail the proposed expenditures and means of financing them together

with information as to past years' actual revenues and expenditures and other data used in making the estimates. The third part is composed of drafts of the appropriation, revenue, and borrowing measures necessary to put the budget into effect. (II-IIB-VII-IIR)

**BUDGET CONTROL** (subject matter)—See appendix, p. 153.

**BUDGET DOCUMENT**—The instrument used by the budget-making authority to present a comprehensive financial program to the appropriating body. The budget document usually consists of three parts. The first part contains a message from the budget-making authority, together with a summary of the proposed expenditures and the means of financing them. The second consists of schedules supporting the summary. These schedules show in detail the information as to past years' actual revenues, expenditures, and other data used in making the estimates. The third part is composed of drafts of the appropriation, revenue, and borrowing measures necessary to put the budget into effect. (IIR)

**BUDGETARY ACCOUNTS**—Those accounts necessary to reflect budget operations and conditions, such as estimated revenues, appropriations, and encumbrances, as distinguished from proprietary accounts. (II-IIB-IIR) See also PROPRIETARY ACCOUNTS.

**BUDGETARY CONTROL**—The control or management of the business affairs of the LEA in accordance with an approved budget with a view toward keeping expenditures within the authorized amounts. (II-IIR)

**BUDGETING**—Budget planning, formulation, administration, analysis, and evaluation. (IIR)

**BUDGETING SERVICES**—Activities concerned with supervising budget planning, formulation, control, and analysis. (IIR, IVR)

**BUILDING**—One continuous structure which may or may not be connected with other structures by passageways. It includes the building itself and the plumbing, sanitary, heating, ventilating, mechanical, and electrical work, and lockers, cabinets, and shelves which are built into the building. Individual structures comprising a school plant that are connected by breezeways or covered passageways that are not enclosed with similar type and quality of construction as the building proper are separate buildings; however,

buildings so connected are accounted for on a single building record form as if they were one building. Passageways enclosed with similar type and quality of construction as the building proper, and tunnels with clear standing head room of at least 6 feet 6 inches, are considered part of the building. Two or more structural units connected by such passageways or tunnels would be one building. (I, II-III)

**BUILDING ACQUISITION, CONSTRUCTION, AND IMPROVEMENT SERVICES**—Activities concerned with building acquisition through purchase or construction, and building improvements. This data element includes initial installation or extension of service systems and other built-in equipment, as well as building additions. (IIR, IVR)

**BUILDING ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS**—Building acquisition through purchase or construction, and building improvements. It includes initial installation or extension of service systems and other built-in equipment, as well as building additions. (IIR, IVR)

**BUILDING ADDITION**—A building area built on to an existing building that increases the building's gross floor area. (III)

**BUILDING AREA**—See AREA OF A BUILDING.

**BUILDING CONTENTS**—Supplies and movable equipment located in a building. (III) See also MOVABLE EQUIPMENT and SUPPLY.

**BUILDING EXCLUSIONS**—Building construction costs which are not included in determining insurable value of a building, such as architects' fees, excavating costs; underground flues, pipes, wires, and drains; foundations under the surface of the basement floor or, where there is no basement, the foundation below the surface of the ground inside the foundation walls of the building; and foundations of boilers and engines which are below the surface of the ground. (III)

**BUILDING FOOTINGS**—The lower part of a building wall below the basement floor, or below grade level if the building does not have a basement, which has been constructed on a suitable soil or rock foundation for the purpose of supporting the building load. Usually, the lower extremity of footings is enlarged for the purpose of distributing the load over a greater area. (III)

**BUILDING SERVICE SYSTEM**—A group of elements or units designed to work together to provide, on a building-wide basis, specific physical services of a particular type, such as heating, cooling, ventilating, water, sewage disposal, electrical, communication, and fire protection. (III)

**BUILDING SITE**—See SCHOOL SITE.

**BUILDING WORK OR REPAIR SHOP ROOM**—A room designed or adapted for use in repairing property. (III)

**BUILDINGS AND GROUNDS ADMINISTRATION RESPONSIBILITY**—The area of responsibility for managing systemwide programs of plant construction, plant operation, and plant maintenance. It consists of management, planning, supervisory, and inspectoral activities related to plant construction, operation, and maintenance that are systemwide in scope. (IV)

**BUILT-IN EQUIPMENT**—Equipment that is an integral part of the building or grounds and permanently attached thereto. (III, IV, VI)

**BUS DRIVER**—A staff member performing the assigned activities of operating a pupil transportation vehicle for the purpose of transporting pupils to and from school or on trips involved in school activities. (IV)

**BUSINESS** (subject matter)—See appendix, p. 150.

**BUSINESS ADMINISTRATION RESPONSIBILITY**—The area of responsibility for managing and conducting the business operations of the school system. It consists of business management activities of two or more of the following areas: financial accounting, buildings and grounds administration, purchasing and stores, personnel administration, food services, and pupil transportation. (IV)

**BUSINESS AND MANAGEMENT PRINCIPLES** (subject matter)—See appendix, p. 158.

**BUSINESS ARITHMETIC OR MATHEMATICS** (subject matter)—See appendix, p. 154.

**BUSINESS COMMUNICATIONS** (subject matter)—See appendix, p. 154.

**BUSINESS CYCLE** Cyclical fluctuations in business

activity, in which periods of depression or recession (contractions) alternate with periods of prosperity or inflation (expansions). The alternating high and low phases follow each other in regular succession, but do not follow any fixed pattern of duration or intensity. (Unpublished VIII)

**BUSINESS DATA PROCESSING SYSTEMS OCCUPATIONS** (subject matter)—See appendix, p. 231.

**BUSINESS ETHICS** (subject matter)—See appendix, p. 154.

**BUSINESS FINANCE** (subject matter)—See appendix, p. 154.

**BUSINESS LAW** (subject matter)—See appendix, p. 154.

**BUSINESS MACHINE MAINTENANCE** (subject matter)—See appendix, p. 255.

**BUSINESS MACHINES** (subject matter)—See appendix, p. 154.

**BUSINESS MANAGER**—A staff member performing assigned activities which have as their purpose the management of the organization of the school system for carrying out its business administration functions. (IV)

**BUSINESS PSYCHOLOGY** (subject matter)—See appendix, p. 155.

**BUSINESS SCHOOL**—A nonpublic educational institution offering courses in preparation for business occupations such as stenography, bookkeeping, and data processing. Such an institution frequently is referred to as a "Private Business School" or "Business College." (VI)

**BUSINESS STATISTICS** (subject matter)—See appendix, p. 155.

**BUSINESS SUPPORT SERVICES**—Activities concerned with purchasing, paying for, transporting, exchanging, and maintaining goods and services for the LEA. Included are the fiscal, acquisition of facilities, operation and maintenance, and internal services for operating all schools. (IIR, IVR)

**BUYER**—A staff member performing assigned activities

such as preparing bids, interviewing sales representatives, and recommending bid awards in connection with the procurement of school supplies, equipment, and other school property. (IV)

## C

**C1 AND C2**—Symbols used to identify pupils who have completed their schoolwork, as follows. C1—Graduated from high school or junior college; C2—Completed other schoolwork. (V) *See also* **COMPLETION OF SCHOOLWORK**.

**CAFETERIA**—A service area designed or adapted specifically for use in preparing meals for, or serving meals to, the student body or other groups and providing facilities for eating such meals. (III, IV)

**CAFETERIA FUND**—*See* **FOOD SERVICE FUND**.

**CAFETERIA MANAGER**—A staff member performing the assigned activities of directing and managing the operation of a school cafeteria. (IV)

**CAFETERIA OR LUNCHROOM**—An area designed, or adapted, specifically for use in preparing meals for, or serving meals to, the student body or other groups, and providing facilities for eating such meals. (III, VI)

**CAFETORIUM**—An instructional space designed, or adapted, specifically for the combined functions that might normally be served by a separate cafeteria and a separate auditorium. (III-VI)

**CALCULUS (subject matter)**—*See* appendix, p. 211.

**CALCULUS WITH ANALYTICAL GEOMETRY (subject matter)**—*See* appendix, p. 212.

**CAPACITY OF A SCHOOL PLANT**—*See* **STUDENT CAPACITY OF A SCHOOL PLANT**.

**CAPITAL IMPROVEMENTS**—All developments having a potentially long period of usefulness. For example, in a community's terms, capital improvements would include streets, traffic control facilities, water and sewage treatment, handling, and distribution facilities, and land acquisition and improvement. (Unpublished VII)

**CAPITAL OUTLAY**—An expenditure which results in

the acquisition of fixed assets or additions to fixed assets which are presumed to have benefits for more than one year. It is an expenditure for land or existing buildings, improvements of grounds, construction of buildings, additions to buildings, remodeling of buildings, or initial, additional, and replacement of equipment. (I, II, III, V, VII-IIR)

**CAPITAL PROJECT FUND**—Used to account for all resources used for acquisition of capital facilities including real property. (IIR)

**CARD-PUNCH MACHINE OPERATOR**—A clerical staff member performing the assigned activity of operating a machine for punching data into cards for use in an accounting machine. (IV)

**CARE AND UPKEEP OF BUILDINGS SERVICES**—Activities concerned with keeping the physical plant clean and ready for daily use. This data element includes operating the heating, lighting, and ventilating systems and preserving the security of school property, it also includes repair and replacement of facilities and equipment. (IIR-IVR)

**CARE AND UPKEEP OF EQUIPMENT SERVICES**—Activities concerned with maintaining, in good condition, equipment owned or used by the LEA. This data element includes such activities as servicing and repairing furniture, machines, and movable equipment. (IIR-IVR)

**CARE AND UPKEEP OF GROUNDS SERVICES**—Activities concerned with maintaining, in good condition and on a daily basis, land and its improvements other than buildings. (IV-IIR-IVR)

**CAREER COUNSELING**—A counseling process in which the pupil is assisted in utilizing his aptitudes and abilities to develop realistic career plans. (VI)

**CARPENTERING ASSIGNMENT**—An assignment to perform activities involved in constructing, erecting, installing, and repairing wooden structures and fixtures. (IIR, IVR)

**CASE LOAD**—The number of students for whom a professional staff member is responsible for providing special educational services. (VR)

**CASEWORK**—The application of the casework method. This involves thorough studies of individual

pupils by staff members skilled in the casework method. (IV-VI)

**CASH**—Currency, checks, postal and express money orders, and bankers' drafts on hand or on deposit with an official or agent designated as custodian of cash; and bank deposits. Any restriction or limitations as to its availability should be indicated. (II-III-III)

**CASH BASIS**—The basis of accounting under which revenues are recorded only when actually received, and only cash disbursements are recorded as expenditures. (II, III)

**CASH CHANGE FUND**—A sum of money set aside for the purpose of providing cash register change. (III)

**CASH DISCOUNTS**—An allowance received or given by vendors for payment of invoices within a stated period of time. (II, III-III-III)

**CASH WITH FISCAL AGENT**—Deposits with fiscal agents, such as commercial banks, for the payment of matured bonds and interest. (III)

**CASHIER**—A clerical staff member performing the activities of accepting cash receipts and keeping a record of cash transactions for an operation of the school involving cash receipts. The use of a cash register may or may not be involved. (IV)

**CATALOGER**—A staff member performing assigned professional library service activities of classifying books and instructional materials according to an established classification system. (IV)

**CATALOGING**—Activities involved in classifying educational media according to an established classification system and building a catalog to facilitate information retrieval which includes listings according to such information as subject, author, title, and producer. (VII)

**CATEGORICAL AID**—Educational support funds provided from a higher governmental level and specifically limited to (earmarked for) a given purpose, e.g., special education, transportation, or vocational education. (VII, III)

**CENSUS**—See SCHOOL CENSUS and CONTINUOUS SCHOOL CENSUS.

**CENSUS AGE**—See SCHOOL CENSUS AGE.

**CENSUS COUNTY DIVISIONS**—Subdivision of the county set up by the Bureau of the Census in eighteen States as statistical areas for the presentation of data. (Unpublished VIII)

**CENSUS TAKER**—A staff member performing assigned activities concerned with the systematic counting of resident persons in a school district and with the recording of such related information about the persons as the school district requires. (IV)

**CENSUS TRACT**—Small areas into which large cities and metropolitan areas have been divided for statistical purposes, and which have been designed to achieve some uniformity of population characteristics, economic status, and living conditions, within each tract. (Unpublished VIII)

**CENTRAL ADMINISTRATIVE OFFICE**—An office or building used primarily for housing personnel and equipment engaged in activities which have as their purpose the general regulation, direction, and control of the affairs of the LEA that are systemwide and not confined to one school, subject, or narrow phase of school activity. (III, IV)

**CENTRAL COOLING BUILDING**—A building used primarily for housing the cooling plant for a school plant or other group of building facilities. (III)

**CENTRAL HEATING AND COOLING BUILDING**—A building used primarily for housing the heating and cooling plants for a school plant or other group of building facilities. (III)

**CENTRAL HEATING BUILDING**—A building used primarily for housing the heating plant for a school plant or other group of building facilities. (III)

**CENTRAL TENDENCY (measure)**—Any of various statistical measures used to obtain a single number that is considered the most representative value of a series of data. (Unpublished VIII)

**CENTRIFUGAL FORCES**—Those forces which impel functions and people to migrate from the central part of an urban area toward, or beyond, its periphery. (Unpublished VIII)

**CENTRIPETAL FORCES**—Those forces which hold



functions and people in the central part of an urban area and attract others to that central area. (Unpublished VIII)

**CERTIFICATE**—The legal document giving authorization from the State (or an agency or organization authorized by the State) to perform services for the LEA. ("Licenses" which meet these criteria should be regarded as "certificates.") (IV-VII-IVR)

**CERTIFICATE ENDORSEMENT**—The information included in or added to an issued certificate specifically indicating the services which the certificate holder is authorized to perform. (IV, VII)

**CERTIFICATE ISSUING AGENCY**—The State department, office, or other State agency (or an agency or organization authorized by the State) which issues certificates, licenses, permits, or other credentials to perform school services. (IV)

**CERTIFICATE OF ATTENDANCE**—A document certifying the presence of the pupil at school during given years or on given days. This document sometimes is awarded in lieu of a diploma or certificate of completion. (V-VI)

**CERTIFICATE OF COMPLETION**—A document certifying the satisfactory completion of a course or a program of studies. This document frequently is awarded for courses for which credit toward graduation is not granted. This document sometimes is referred to as a "certificate of training." (V, VI, VR)

**CERTIFICATE OF HIGH SCHOOL EQUIVALENCY**—A formal document issued by a State department of education or other authorized agency certifying that an individual has met the State requirements for high school graduation by attaining satisfactory scores on the Tests of General Educational Development or another State-specified examination. Certificates of high school equivalency are official documents that frequently are accepted by employers, post-secondary educational institutions, and others in the same manner as high school diplomas. (V, VI, VII-VR) *See also* HIGH SCHOOL EQUIVALENCY EXAMINATION and TESTS OF GENERAL EDUCATIONAL DEVELOPMENT (GED).

**CERTIFICATE OF TRAINING**—*See* CERTIFICATE OF COMPLETION.

**CERTIFICATE RENEWAL**—The reissuance of a given

certificate held by a staff member upon expiration of the term specified on the old certificate and upon evidence submitted by the staff member that specified conditions for renewal (e.g., experience, additional preparation, or both) have been met. (The renewal of a certificate through endorsement is regarded as certificate renewal.) (IV)

**CERTIFICATE REVOCATION**—The annulment of a credential (such as certificate, license, or permit) by the agency which issued it. (IV)

**CERTIFICATED**—Authorized by the State to perform services for which a legal credential is necessary. (IV)

**CERTIFICATION**—The general process by which the State (or agency or organization authorized by the State) provides a credential to an individual. (IV-VII-IVR)

**CERTIFICATION OF BIRTH**—*See* AGE CERTIFICATE.

**CHART OF ACCOUNTS**—A list of all accounts generally used in an individual accounting system. In addition to account title, the chart includes an account number which has been assigned to each account. Accounts in the chart are arranged with accounts of a similar nature; for example, assets and liabilities. (IIB, IIR, IVR)

**CHECK**—A bill of exchange drawn on a bank payable on demand; a written order on a bank to pay on demand a specified sum of money to a named person, to his order, or to bearer out of money on deposit to the credit of the maker. A check differs from a warrant in that the latter is not necessarily payable on demand and may not be negotiable; and it differs from a voucher in that the latter is not an order to pay. A voucher-check combines the distinguishing marks of a voucher and a check; it shows the propriety of a payment and is an order to pay. (II-IIB-IIR)

**CHIEF EXECUTIVE ASSIGNMENT**—An assignment to a staff member to perform the head executive management activities of a school system. (IV)

**CHIEF STATE SCHOOL OFFICER**—The chief executive officer of the State department of education. (VII)

**CHILDREN WITH SPECIFIC LEARNING DISABILITIES**—Children who have a disorder in one or more of

The basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. Such disorders include such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Such term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps; of mental retardation, of emotional disturbance, or of environmental disadvantage. (VR)

**CHURCH-RELATED SCHOOL**—A school associated with a religious or church organization. (VR)

**CIRCULATION AREA**—A building area used for general traffic, omitting such areas as unit-contained corridors and stairs located within, and serving parts of, a unit or suite. (III)

**CITIZENSHIP EDUCATION** (subject matter)—See appendix, p. 239.

**CITY PLANNING**—As traditionally conceived, a means for systematically anticipating and achieving adjustment in the physical environment of a city consistent with social and economic trends and sound principles of civic design. More recent concepts of planning extend to include a complete consideration of social values, optimizing the human landscape, and the development of advocacy planning wherein the planning represents the people of a neighborhood or segment of the community. (Unpublished VIII)

**CIVIC ACTIVITIES** School related activities such as parent-teacher association meetings and such non-school related civic activities as public forums, lectures, and civil defense planning usually connected with school services. (IV-III, IVR)

**CIVIC ORGANIZATION**—Broadly used, an organized group of members of a community having as their common purpose the promoting and furthering of public causes or enterprises. (Unpublished VIII)

**CIVIL**—Pertaining to a community of citizens, their government, or their interrelations. (VII)

**CIVIL DEFENSE**—A program designed to provide adequate defense for a community of citizens against loss of life or property due to war or natural disaster. (VI-VII)

**CIVIL RIGHTS**—Those rights guaranteed to the individual by the constitution and congressional acts. (VII)  
*See also* HUMAN RIGHTS.

**CLASS**—A group of students assigned to one or more teachers or other staff members for a given period of time for instruction or other activity in a situation where the teacher(s) and the students are in the presence of each other. (I, III-IV, V, VI, VR)

**CLASS PERIOD**—The portion of the daily session set aside for instruction in classes, when most classes meet for a single such unit of time. (V-VI, VR)

**CLASS SIZE**—The membership of a class as of a given date. (VR)

**CLASS TIME PER WEEK**—The average number of minutes the staff member is assigned to each class each week, including laboratory periods. (IV) *See also* WORKLOAD and UNIT OF WORK.

**CLASSICAL LANGUAGES** (subject matter)—See appendix, p. 182.

**CLASSROOM**—A space designed or adapted for regularly scheduled group instruction. This includes the so-called regular classrooms and special use classrooms such as laboratories and shops but excludes such rooms as auditoriums, lunch rooms, libraries, and gymnasiums. (III-V-VII)

**CLASSROOM TEACHER**—A staff member assigned the professional activities of instructing pupils—in self-contained classes or courses—in classroom situations for which daily pupil attendance figures for the school system are kept. (IV-VI) *See also* TEACHING ASSIGNMENT and CLASSROOM TEACHING ASSIGNMENT.

**CLASSROOM TEACHERS PER 1,000 PUPILS IN AVERAGE DAILY MEMBERSHIP**—The number representing the total full-time equivalency of classroom teaching assignments in a school system during a given period of time, multiplied by 1,000 and divided by the average daily membership (ADM) of pupils during this period. (V, VI)

**CLASSROOM TEACHING ASSIGNMENT**—An assignment to a staff member to instruct pupils in courses in classroom situations for which daily pupil attendance figures for the school system are kept. (V) *See also* TEACHING ASSIGNMENT.

**CLEARING ACCOUNTS** Accounts used to accumulate total receipts or expenditures either for later distribution among the accounts to which such receipts or expenditures are properly allocable, or for recording the net differences under the proper account. (II, IIR) *See also* REVOLVING FUND; PREPAID EXPENSES; and PETTY CASH.

**CLERICAL ASSIGNMENT**—An assignment to perform activities concerned with preparing, transferring, transcribing, systematizing, or filing written communications and records. This assignment includes the positions of clerk, clerk-typist, stenographer, file clerk, and secretary. (IV-IIR, IVR)

**CLERICAL PERSONNEL**—Staff members performing activities concerned with preparing, transferring, transcribing, systematizing, or filing written communications and records. Included are stenographers and secretaries. (I, II, III-IV, VII-IIR-IVR)

**CLERICAL PRACTICE** (subject matter)—*See* appendix, p. 000.

**CLERK**—A clerical staff member performing a variety of assigned routine activities pertaining to written records and reports. The use of simple machines may or may not be involved in the assignment. (IV) *See also* CLERICAL ASSIGNMENT.

**CLOCK-HOUR**—About 60 minutes of classwork or instruction. This may include time for passing from one class to another. (IV-VR)

**CLOSING ENTRIES**—Entries which are made at the end of the accounting period to transfer balances in General Ledger Receipt, Expenditure, Appropriation and Estimated Revenue accounts to the Fund Balance account. (IIB)

**COCURRICULAR ACTIVITIES**—Activities, under the sponsorship or direction of the school, of the type for which participation generally is not required and credit generally is not awarded. (VI, VII-IIR, IVR-VR)

**CODE**—A system of numbers or other symbolic designations used for identifying previously defined items and categories of information. (IV, V) *See also* CODING and CODE DESIGNATION.

**CODE DESIGNATION**—A number or other symbolic designation assigned to a specific item or category of information for identification purposes. (V)

**CODING**—A means of distinguishing among items and categories of information by assigning numbers or other symbolic designations so that the items and categories are readily identifiable. (II, III-IV, V-IIB-VII, IIR, VR)

**COGNITIVE AND PERCEPTUAL SKILLS TEST**—An examination measuring components of a person's mental ability, such as visual memory, figure-ground differentiation, auditory memory, reasoning ability, and sequential processing. (VR)

**COLLECTORS**—The third rank in the classification of streets, providing the links between arterials and local streets and thus serving both to move vehicles and, to a lesser degree, to serve adjoining properties. (Unpublished VIII)

**COLLEGE**—A postsecondary school which offers general or liberal arts education, usually leading to a first degree. For the purposes of this handbook, junior colleges and community colleges may be included under this terminology. (IV-VII)

**COMBINED COMMUNITY COLLEGE AND SECONDARY SCHOOL PLANT**—A school plant that houses on a permanent basis two schools only—a secondary and a community college. (III, V, VI)

**COMBINED ELEMENTARY AND SECONDARY SCHOOL PLANT**—A school plant which houses both an elementary school and a secondary school. (I, II-III, IV, V, VI-IIR, IVR)

**COMBUSTIBLE BUILDING**—An all-frame building; a building with fire-resistive veneer on wood frame; or one with fire-resistive bearing walls, but otherwise of combustible construction. (III)

**COMMERCIAL ART OCCUPATIONS** (subject matter)—*See* appendix, p. 255.

**COMMERCIAL FISHERY OCCUPATIONS** (subject matter)—*See* appendix, p. 255.

**COMMERCIAL PHOTOGRAPHY OCCUPATIONS** (subject matter)—*See* appendix, p. 256.

**COMMISSION**—A group of people chosen by appropriate authority to perform certain duties or tasks, or to exercise certain powers. (VII)

**COMMUNICATION** (object of expenditure)—Expenditures for telephone and telegraph services as well as postage machine rental and postage. (IIR)

**COMMUNICATION DISORDER**—An impairment in speech and/or language (including impaired articulation, stuttering, voice impairment, and a receptive or expressive verbal language handicap) that is sufficiently severe to adversely affect the performance of an individual in the usual school program. (VR)

**COMMUNICATIONS SKILLS** (subject matter)—See appendix, p. 268.

**COMMUNITY COLLEGE**—A junior college usually operated by the board of education of a local basic administrative unit (including the independent local board for one or more community colleges). Instruction is adapted in content, level, and schedule to the needs of the local community. (I, II, III-IV, V, VI, VII) See also **COMMUNITY/JUNIOR COLLEGE** and **JUNIOR COLLEGE**.

**COMMUNITY COLLEGE SCHOOL PLANT**—A plant that houses on a permanent basis one school only—a school that begins with grade 13, offers at least 1 but less than 4 years of work, and does not grant the baccalaureate degree. (III)

**COMMUNITY COUNCIL**—An advisory council to the local school which might be composed of all the block leaders in the area served by the school. Such councils are used in the Community Education movement to assist the community school director in getting and using information from the community. Sometimes the council members are elected by residents of the community. (Unpublished VIII)

**COMMUNITY COUNSELOR**—A school employee sometimes called a Home Counselor. A citizen from the community (usually a woman) who is trained in working with families to help them meet family problems and to introduce them to ways of upgrading the quality of home and family life. (Unpublished VIII)

**COMMUNITY EDUCATION**—The concept of the community as a whole being the primary educative influence upon the members of the community. This concept recognizes that all people in a community, regardless of age, have educational needs and that resources to meet those needs are largely resident in

the community. It recognizes that schools can coordinate the efforts of agencies and resources. (Unpublished VIII)

**COMMUNITY IDENTITY**—The extent to which an individual regards the community he lives in as a characteristic necessary to describe him. (Unpublished VIII)

**COMMUNITY/JUNIOR COLLEGE**—An institution of higher education which usually offers the first two years of college instruction and career education, grants an associate's degree, and does not grant a bachelor's degree. It is either a separately organized institution (public or nonpublic) or an institution which is a part of a public school system or system of junior colleges. Offerings include transfer, occupational, and/or general studies programs at the post-secondary instructional level and may also include adult/continuing education programs. (IIR, IVR, VR) See also **COMMUNITY COLLEGE** and **JUNIOR COLLEGE**.

**COMMUNITY PLANNING**—A process of long-range, community-wide development involving: (a) comprehensive study and analysis of the community's problems, needs and resources; (b) the formulation of goals; (c) determination of a plan of action; and (d) implementation. (Unpublished IX)

**COMMUNITY RECREATION**—Concerned with providing recreation programs for the community as a whole, or for some segment of the community. It includes such staff activities as organizing and supervising playgrounds, swimming pools, and other recreation programs for the community. (IV, IIR, IVR)

**COMMUNITY RELATIONS**—Concerned with conducting community relations activities. It includes maintaining liaison with local civic groups, serving as the central point for all requests for public speaking engagements, responses to public inquiry, arranging for tours of, and visits to, the LEA. (IIR, IVR)

**COMMUNITY SCHOOL**—An elementary, secondary, and/or adult/continuing education organizational arrangement (or institution), operated by a local board of public education, in which instruction and other activities are intended to be relevant and applicable to the needs of all or most segments of the total population of the community served. (VR)

**COMMUNITY SCHOOL COORDINATOR**—A professional employee of the school district whose primary function is to coordinate the efforts of the various community school directors through the school district. (Unpublished VIII)

**COMMUNITY SCHOOL DIRECTOR**—A professional position within a community school. His primary responsibility is to relate to the school community, collect information relative to needs, and coordinate all the efforts of the community to meet those needs. He is responsible to the building principal or the coordinator. (Unpublished VIII)

**COMMUNITY SERVICE EDUCATION**—A term frequently used synonymously with the term "Adult/Continuing Education." This term reflects the efforts of community colleges and other institutions or agencies to extend their resources (e.g., facilities, personnel, and expertise) into the community through programs of noncredit educational, avocational, or recreational courses, seminars, conferences, workshops, and other events utilizing any applicable facility or locale. (VR) *See also ADULT/CONTINUING EDUCATION.*

**COMMUNITY SERVICES**—Services, other than public school and adult education functions, provided by the school or LEA for purposes relating to the community as a whole or some segment of the community. These include such services as community recreation programs, civic activities, public libraries, programs of custody and care of children, community welfare activities, and services for nonpublic school pupils provided by the public schools on a continuing basis. (I, II, III-IV-VI-IIR, IVR)

**COMMUNITY SERVICES BUILDING**—A building used primarily for housing personnel and equipment engaged in services provided by the school district for the community as a whole, or some segment of the community, excluding public school and adult education programs operated by the school district. This term includes buildings housing recreation activities that are not considered part of the regular instructional program or student-body activity program, civic activities, such as meetings of citizens, public forums and lectures, parent-teachers' associations, and civil defense planning, activities concerned with the custodial and detention care of children, activities concerned with provision of aid to indigent children; and community canneries and laundries. Public library buildings and playground buildings are not designated by this term. (III)

**COMPARABILITY**—The characteristic of commonality among or between selected elements measured in terms of identical constants. The accuracy of the measurement of the degree of comparability is usually dependent on the number of constants applied. (IIR, IVR)

**COMPARABLE INFORMATION**—Items of information which can be compared and combined as recorded because they are based on the same definitions. (IV, V)

**COMPLETION OF SCHOOLWORK**—Completing a program of studies and withdrawing from school. This includes graduation from high school (grade 12) or college, or otherwise fulfilling the requirements for a prescribed program of studies. Midyear or year-end transfer to a higher grade within the same school is not considered as completion of schoolwork. (V-VI)

**COMPOSITION (subject matter)**—*See appendix, p. 177.*

**COMPOUND ENTRY**—A balanced entry which contains two or more debits or two or more credits. (IIB)

**COMPREHENSIVE HIGH SCHOOL**—A secondary school with a number of departments (e.g., academic, industrial, business, and vocational) offering a diversified program to meet the needs of students with varying interests and abilities. (IV, V, VI, VII, VR)

**COMPULSORY SCHOOL ATTENDANCE**—The practice of requiring school attendance by law. (V, VR)

**COMPULSORY SCHOOL ATTENDANCE AGE**—The age span during which a child is required by law to attend school. (V, VR)

**COMPUTER-ASSISTED INSTRUCTION**—Programed instruction utilizing an electronic computer as the principal medium of instruction. (VI, IIR, IVR)

**COMPUTER-ASSISTED INSTRUCTION SERVICES**—Activities concerned with planning, programing, writing, and presenting educational programs or segments of programs which have been especially programed for a computer to be used as the principal medium of instruction. (IVR)

**COMPUTER MATHEMATICS (subject matter)**—*See appendix, p. 212.*

**COMPUTER OPERATING ASSIGNMENT**—An assignment to operate and control computers and related peripheral equipment. (IIR, IVR)

**COMPUTER PROGRAMING**—Preparation of a logical sequence of operations to be performed by a computer in solving a problem or processing data, the preparation of coded instructions and data for such a sequence. (VII)

**CONCEPT**—An idea or mental image of what a thing in general should be, especially a representation of the common elements or attributes distinguishing one group of objects or ideas from other groups. (VI)

**CONDEMNATION PROCEEDINGS**—The process by which property of a private owner is taken through right of eminent domain for public use. (III)

**CONDITION OF ROADS**—Determined by classification assigned officially by an agency such as the Office of the County Engineer or the State Highway Department. This is an important factor in determining pupil transportation costs and planning bus routes. (Unpublished VIII)

**CONFIDENTIAL REPORTS FROM OUTSIDE AGENCIES (student record)**—Confidential information from the records of cooperating agencies and individuals such as hospitals, child welfare agencies, and the juvenile court; or correction officers and private practitioners. Any such reports should be accepted only with the mutual understanding that they will not be incorporated into cumulative records or special student services records, they will be under the direct supervision of qualified school personnel and they will be made available on request to students or their parents. (VR) *See also* CUMULATIVE STUDENT RECORD and SPECIAL STUDENT SERVICES RECORD.

**CONGRESSIONAL DISTRICT** A geographical area within a State, defined for electoral purposes and identified by a number or code. (VI)

**CONSERVATION (ENVIRONMENT)** (subject matter)—*See* appendix, p. 225.

**CONSERVATION-ENVIRONMENTAL EDUCATION** (subject matter)—*See* appendix, p. 239.

**CONSTRUCTION** (subject matter) *See* appendix, p. 200.

**CONSTRUCTION AND MAINTENANCE TRADES** (subject matter)—*See* appendix, p. 256.

**CONSTRUCTION AREAS**—The areas of walls, and of piers that are to be included in construction, shall be the total area at each floor level measured through the wall, pier, or column from principal face to face, exclusive of any such area otherwise assigned, such as recessed case and alcove spaces which are assigned as parts of classrooms or other functional floor areas. (III)

**CONSTRUCTION COST OF A BUILDING**—Contract cost plus costs for architectural and engineering, legal, and educational consultative services rendered in connection with the building's construction, including salaries and expenses for any such services that may be rendered by school district employees. (III)

**CONSTRUCTION CONTRACTS PAYABLE**—Amounts due by an LEA on contracts for construction of buildings, structures, and other improvements. (IIR)

**CONSTRUCTION CONTRACTS PAYABLE—RETAINED PERCENTAGE**—Liabilities on account of construction contracts for that portion of the work which has been completed but on which part of the liability has not been paid pending final inspection, or the lapse of a specified time period, or both. The unpaid amount is usually a stated percentage of the contract price. (IIR)

**CONSTRUCTION FUND**—The fund which finances the construction of school buildings and the acquisition of any related land and equipment. (IIB)

**CONSTRUCTION WORK IN PROGRESS**—The cost of construction work undertaken but not yet completed. (IIR)

**CONSULTANT**—A person who gives professional or technical advice and assistance. A consultant may perform his services under contract (purchased services) or he may be an employee on the payroll of a State agency. (II, III-IV-VII, IIR, IVR)

**CONSULTANTS OR SUPERVISORS OF INSTRUCTION**—*See* SUPERVISORS OF INSTRUCTION.

**CONSULTATIVE** (State education agency)—Relating to consultation, advice, assistance, and counsel. Consultative services may be performed under contract (purchased services) or by an employee on the payroll of the State agency. (VII)

**CONSUMER EDUCATION** (subject matter)—See appendix, p. 156.

**CONTINGENT FUND**—Assets or other resources set aside to provide for unforeseen expenditures, or for anticipated expenditures of uncertain amount. (II, IIR)

**CONTINGENT LIABILITIES**—Items which may become liabilities as a result of conditions undetermined at a given date, such as guarantees, pending law suits, judgments under appeal, and unsettled disputed claims. (II, IIR)

**CONTINUING CONTRACT**—A contract which continues automatically from year to year without action on the part of governing authority, but which may be terminated through appropriate action on the part of the parties involved. (IV, VII, IVR)

**CONTINUING EDUCATION**—See ADULT/CONTINUING EDUCATION.

**CONTINUITY**—The orderly, planned sequence of educational experiences, as from one grade, school level, stage of development, or aspect of subject-matter content to another. (VI)

**CONTINUOUS PROMOTION**—The practice of promoting pupils on the basis of chronological age. (VI)

**CONTINUOUS SCHOOL CENSUS**—An individual record of every resident child from birth to 21 years of age, or within some other age limits, which is checked regularly with all sources of information available to the school so as to provide an accurate current list of all children residing in a given administrative unit. (V, VR)

**CONTINUOUS STUDENT ACCOUNTING**—A concept involving the acceptance of responsibility to account positively for a student once he has enrolled in the school or school system. The name of the student remains on the membership rolls—even though he does not appear for classes at the beginning of a new term—until it is determined that his name should be withdrawn from the rolls. (VR)

**CONTRACT COST OF A BUILDING**—The cost for the actual erection of the building, involving such costs as those for general construction contracts plus extras to the contractor and less credits, heating and ventilating contracts, plumbing contracts, electrical contracts,

painting contracts, built-in equipment, and outdoor or underground parts of building service systems; and any salaries, construction materials, rental fees for construction equipment, and similar expenses for construction performed by school district employees. Costs for movable equipment are not included. (III)

**CONTRACTED SERVICES**—Services rendered by personnel who are not on the payroll of the LEA, including all related expense covered by the contract. (II-IV, VI-VII-IIR, IVR) See also PURCHASED SERVICES.

**CONTRACTS PAYABLE**—Amounts due on contracts for goods and services received by an LEA. (IIR)

**CONTRIBUTIONS AND DONATIONS FROM PRIVATE SOURCES**—Money received from a philanthropic foundation, private individuals, or private organizations for which no payment or special service to the donor is expected. Separate accounts may be maintained for revenue unrestricted as to use, and revenue which is restricted as to use. (IIR, IVR)

**CONTROLLING ACCOUNT**—An account usually kept in the general ledger in which the postings to a number of identical, similar, or related accounts are summarized so that the balance in the controlling account equals the sum of the balances of the detailed accounts. The controlling account serves as a check on the accuracy of the detailed account postings and summarizes the expenditures in relation to the budget estimates. (II-IIB-IIR, IVR)

**CONTROLLER**—A staff member performing assigned activities in connection with the control of expenditures in terms of budgetary restrictions and the certification of the legality of expenditures in accordance with applicable laws and regulations. (IV, VII)

**CONVENIENT COMMUTING RANGE**—Distance which can be traversed easily from home to school or work in about one hour's time by public or private transportation. (Unpublished VIII)

**COOPERATIVE EDUCATION**—A combination program of study and practice conducted on an alternating schedule of half days, weeks, or other periods of time providing legal employment for students with organized on-the-job training and correlated school instruction. (VI, VR)

**COOPERATIVE EXTENSION EDUCATION**—A unique cooperative venture among Federal, State, and county governments, with the State land-grant colleges serving as administrative centers. Heavy emphasis is on agriculture and home economics, but the program has expanded to include health, community development, conservation, and public affairs. It relies mostly on nonclassroom methods. (Unpublished IX)

**COOPERATIVE ON-THE-JOB TRAINING**—An activity in which pupils in occupational programs of studies spend a portion of their time in supervised employment (i.e., in on-the-job training) in business or industry. This activity frequently is referred to as "cooperative work experience." (VI)

**COOPERATIVE PART-TIME EMPLOYMENT**—Part-time employment combined with schoolwork through cooperation between the school and business or industry. (VI)

**COOPERATIVE WORK EXPERIENCE**—See **COOPERATIVE ON-THE-JOB TRAINING**.

**COORDINATION** (State education agency)—Activities which have the purpose of unifying programs for the accomplishment of common objectives. The coordination of programs may be within the State department of education or between programs within the department and programs outside the department. (VII)

**COORDINATOR**—A staff member performing assigned activities which have the purpose of unifying programs for the accomplishment of common objectives. The coordination of programs may be within the school system or between programs within the school and programs outside the school. (IV)

**CORRECTIONAL SCHOOLS**—Schools for those pupils who, because of severe anti-social behavior, cannot be allowed to participate in the regular school program. (VII)

**CORRECTIVE INSTITUTION**—An institution to which children and/or youth are committed for the correction of inappropriate patterns of social behavior. (V, VR) See also **INSTITUTION FOR DELINQUENT CHILDREN**.

**CORRELATION**—A plan whereby teachers of courses in two or more subject-matter areas endeavor to relate

the work of a given group of pupils in these areas to common large problems. (VI)

**CORRESPONDENCE INSTRUCTION**—See **INSTRUCTION BY CORRESPONDENCE**.

**COST**—The amount of money or money's worth given for property or services. Costs may be incurred even before money is paid, that is, as soon as liability is incurred. Ultimately, however, money or money's worth must be given in exchange. Again, the cost of some property or service may in turn become a part of the cost of another property or service. For example, the cost of part or all of the materials purchased at a certain time will be reflected in the cost of articles made from such materials or in the cost of those services in the rendering of which the materials were used. (II-III)

**COST, ORIGINAL**—See **ORIGINAL COST**.

**COST, PER PUPIL**—See **COST PER STUDENT**.

**COST, REPLACEMENT**—See **REPLACEMENT COST**.

**COST, UNIT**—See **UNIT COST**.

**COST ACCOUNTING**—That method of accounting which provides for the assembling and recording of all the elements of cost incurred to accomplish a purpose, to carry on an activity or operation, or to complete a unit of work or a specific job. (II-III, VII, IIR, IVR)

**COST BENEFIT**—Analyses which provide the means for comparing the resources to be allocated to a specific program with the results likely to be obtained from it, or, analyses which provide the means for comparing the results likely to be obtained from the allocation of certain resources toward the achievement of alternate or competing objectives. (VII, IIR, IVR)

**COST CENTER**—The smallest segment of a program that is separately recognized in the agency's records, accounts, and reports. Program-oriented budgeting, accounting, and reporting aspects of an information system are usually built upon the identification and use of a set of cost centers. (VII, IIR, IVR)

**COST EFFECTIVENESS**—Analyses designed to measure the extent to which resources allocated to a specific objective under each of several alternatives actually contribute to accomplishing that objective, so



that different ways of gaining the objective may be compared. (VII, IIR, IVR)

**COST FEASIBILITY STUDY**—An assessment of all direct and indirect costs relative to the acquisition and development of a site with the sum of these costs compared to available funds for development. (Unpublished VIII)

**COST LEDGER**—A subsidiary record wherein each project, job, production center, process, operation, product, or service is given a separate account under which all items of its costs are posted in the required detail. (II-IIB-IR)

**COST OF A BUILDING**—The actual cost to the owning unit in acquiring the building, regardless of how the building may have been acquired.

The cost of a building that has been erected by the owning school district is the construction cost of the original building and any subsequent additions or remodeling, plus any miscellaneous expenses of the district connected with the construction and acquisition of a building and additions, such as advertisements for contracts and expenses connected with the sale of bonds; less the estimated cost of any part of the building that has been removed. . . .

When the actual cost of a building is not known, the estimated cost as of time of acquisition should be used as the cost figure. When a building has been received as a gift or acquired at no cost through annexation or reorganization, the record entry for its cost is zero plus any costs connected with acquiring and conditioning the building for use, with an indication that it was received as a gift or at no cost to the district. (III)

**COST OF EQUIPMENT**—The purchase price paid by the owning unit, including the cost of any accessories or attachments regardless of when they were purchased, plus any freight and installation charges. Expenditures for repairs to a piece of equipment are not included as part of the cost of the equipment, however, when used equipment is purchased and reconditioned in order to place it in service, such reconditioning costs are included as part of the equipment cost. When the actual cost is not known, the estimated cost as of the time of acquisition is substituted. When equipment has been received as a gift, or acquired at no cost through annexation or reorganization, the record entry for its cost is zero plus

any costs connected with acquiring, installing, and conditioning it for use, with an indication that it was received as a gift or at no cost to the district. (III)

**COST OF IMPROVEMENTS TO SITE**—The contract amount for contract work and salaries and other expenses for work done by district employees, plus any other expenses connected with any initial installation or extension of a site improvement. It also includes the cost of any special assessments against the school district for capital improvements on or off the site, such as streets, curbs, and drains on or adjacent to the site, and any easements involved.

When the actual cost of an improvement to site is unknown and the cost of the land is known and has been recorded, the cost figure to use is the estimate cost as of the time the improvement was made.

When an improvement to site has been received as a gift, or acquired at no cost through annexation or reorganization, the record entry for its cost is zero plus any costs connected with its acquisition and installation, with an indication that it was a gift or acquired at no cost. . . . (III)

**COST OF LAND**—The purchase price paid by the owning unit for all land that makes up a site and all improvements to the land existing at the time of purchase, plus all costs related to acquiring title to the land, such as appraisal fees, search and title insurance, site surveys, and condemnation proceedings.

If the purchase price of the land also includes some buildings which are retained for use, the appraised value of the buildings should be deducted from the price of the land and a record established for the buildings. If the buildings are sold rather than retained for use, the salvage value should be deducted from the price of the land.

When setting up records for land that has been owned for some time and for which the actual cost is not known, the cost figure to use is the estimated cost as of the time of acquisition. This figure includes the estimated cost of the land and any existing improvements to site for which actual cost figures are not available. When land has been received as a gift, or acquired at no cost through annexation or reorganization, the record entry for its cost is zero plus any costs related to acquiring title to the land, with an indication that the land was a gift or acquired at no cost.

Improvements to site made after land has been acquired by a school district are not included in the cost of land except as indicated in the preceding paragraph. (III)

**COST PER STUDENT**—Current expenditures for a given period of time and/or for given programs, divided by an appropriate student unit of measure such as average daily attendance, or students in average daily membership. (IIR-VR) *See also* CURRENT EXPENDITURES; ANNUAL CURRENT EXPENDITURES PER STUDENT IN ADA; ANNUAL CURRENT EXPENDITURES PER STUDENT IN ADM; CURRENT EXPENDITURES PER STUDENT; CURRENT EXPENDITURES PER STUDENT PER DAY (ADA); and CURRENT EXPENDITURES PER STUDENT PER DAY (ADM).

**COST REVENUE STUDIES**—An analysis designed to provide information on the governmental costs of supplying public improvements and services to urban land areas as these costs relate to available monies to finance such improvements and services and the revenues that will be generated by the urban land area provided with these improvements and services. (Unpublished VIII)

**COST UNIT**—The unit of product or service whose cost is computed. (II, IIR, IVR)

**COSTS, BASIC INPUT**—*See* BASIC INPUT COSTS.

**COSTS, DIRECT**—*See* DIRECT COSTS.

**COSTS, INDIRECT**—*See* INDIRECT COSTS.

**COSTS, OVERHEAD**—*See* OVERHEAD COSTS.

**COUNCIL-MANAGER PLAN OF CITY GOVERNMENT**—A form of city government consisting of a council and a manager. The executive head, or manager, is not directly responsible to the electorate. He is responsible to an elected city council which hires him to carry out its policies. Ideally, the manager is chosen less for his political popularity or political affiliation than for his ability as a capable executive. (Unpublished VIII)

**COUNSELING ASSIGNMENT**—An assignment to perform the activities of assisting pupils and assisting parents and teachers to assist pupils in making personal plans and decisions in relation to education, career, or personal development. (IV, V, IIR-IVR)

**COUNSELING SERVICES**—Activities concerned with the relationship between pupils and pupils, counselors and pupils as counselees, and between counselors and other staff members and parents for the purpose of assisting pupils to understand their educational, personal, and occupational strengths and limitations; to relate their abilities, emotions, and aptitudes to educational and career opportunities, using their abilities in formulating realistic plans; and to achieve satisfying personal and social development. (IVR)

**COUNSELOR**—A staff member performing assigned professional services having the purpose of assisting pupils in making plans and choices in relation to education, vocation, or personal development. (IV)

**COUNSELORS PER 1,000 STUDENTS IN AVERAGE DAILY ATTENDANCE**—The number representing the total full-time equivalency of counselor assignments in a school or school system during a given period of time, multiplied by 1,000 and divided by the average daily attendance of students during this period. (VR)

**COUNSELORS PER 1,000 STUDENTS IN AVERAGE DAILY MEMBERSHIP**—The number representing the total full-time equivalency of counselor assignments in a school or school system during a given period of time, multiplied by 1,000 and divided by the average daily membership of students during this period. (VR)

**COUNTY**—The primary division of the State in most of the United States. There are no counties in Alaska, where election districts are primary. The county is known as a parish in Louisiana. (In Maryland, Missouri, and Virginia, independent cities are also primary divisions of their States.) There are no counties in New England. (Unpublished)

**COUNTY ROADS**—All roads legally classed as county property and maintained by the county. Construction costs are financed by the county and with funds from the States under various funding and rebate programs. (Unpublished)

**COURSE**—An organization of subject matter and related learning experiences provided for the instruction of students on a regular or systematic basis, usually for a predetermined period of time (e.g., a semester, a regular school term, and a 2-week workshop). Credit toward graduation or completion of a program of studies generally is given students for the successful completion of a course. (IV, V, VI, VII, IVR, VR)

**COURSE, ADVANCED PLACEMENT**—See **ADVANCED PLACEMENT COURSE**.

**COURSE, CREDIT**—See **CREDIT COURSE**.

**COURSE, NONCREDIT**—See **NONCREDIT COURSE**.

**COURSE, VOCATIONAL**—See **VOCATIONAL COURSE**.

**COURSE OF STUDY**—A written guide prepared by administrators, supervisors, consultants, and teachers of a school system or school, or by consultants and other specialists at the State level, as an aid to teaching a given course or an aspect of subject-matter content to a given type of pupil. (VI, VII)

**COVERED PASSAGEWAY**—A walkway or drive covered by a roof and designed to facilitate the movement of general traffic on the site. Passageways enclosed with similar type and quality of construction as the building proper are considered part of the building. (III)

**CRAFTS (INDUSTRIAL)** (subject matter)—See appendix, p. 200.

**CRAFTS AND TRADES**—A grouping of manual assignments requiring a relatively high skill level (usually acquired through an extensive period of training) as well as requiring considerable judgment and a thorough and comprehensive knowledge of the processes involved in the work. (IV-IIR-IVR)

**CRAFTS AND TRADES APPRENTICESHIP ASSIGNMENT**—An assignment to perform the activities of an apprentice in crafts and trades. (IIR, IVR)

**CREDENTIAL**—The document issued to a staff member by the State (or an agency or organization authorized by the State) authorizing the holder to perform services for the LEA. "Certificate," "license," or "permit" are examples of terms frequently used interchangeably with "credential." (IV, VII, IVR)

**CREDIT**—The unit of value, awarded for the successful completion of certain courses, intended to indicate the quantity of course instruction in relation to the total requirements for a diploma, certificate, or degree. Credits are frequently expressed in terms such as "Carnegie units," "credits," "semester credit hours," and "quarter credit hours." (IV, V, VI, VII)

**CREDIT AND COLLECTIONS** (subject matter)—See appendix, p. 156.

**CREDIT BY EXAMINATION**—(1) Credit earned through the applicant's successful completion of a proficiency test in place of performing activities ordinarily associated with formal course work; (2) the process of certifying achievement by systematic observation of desired behavior. (Unpublished IX)

**CREDIT COURSE**—A course for which students receive credit applicable toward graduation or completion of a program of studies (V-VR)

**CREDITABLE SERVICE**—In reference to membership in a retirement system, the number of years of service provided by the staff member that can be counted toward a determination of the date of the staff member's earliest or compulsory retirement, and usually a determination of the amount of income the staff member will receive upon retirement. (IV)

**CRIPPLED**—See **ORTHOPEDEICALLY HANDICAPPED (CRIPPLED)**.

**CRISIS TEACHER**—A teacher specially trained both in remedial education and in helping pupils overcome emotional problems, serving a single school by providing immediate help to individual pupils at times when they are unable to cope with their usual classroom situations. This periodic assistance is intended to enable pupils with behavioral difficulties (which may or may not be accompanied by academic difficulties) to return to their usual classrooms. Close liaison is maintained with classroom teachers and supporting services, and referrals are made as required for diagnosis and intensive help. (VI)

**CRITERION REFERENCED TEST**—An examination for which an individual's score indicates the relationship of the individual's performance to a specified criterion, e.g., a specified score on a licensure test, a given number of words to be typed per minute with a specified degree of accuracy, ability to operate a given piece of equipment, and ability to perform examples of a type of arithmetic computation with a specified accuracy within a given time limit. (VR)

**CROSSWALK**—In data processing, a procedure by which codes used for data in one data base are translated into the codes of another data base making it possible to relate information between or among data bases. (VR)

**CULTURAL HANDICAP**—A deviation or deficiency in cultural or environmental background that adversely affects the school performance or learning of an individual. Individuals with cultural handicaps may be classified into groups such as: migrant children, functionally illiterate, the non-English speaking, and member of disadvantaged cultural groups. (VI) *See also* **CULTURALLY DIFFERENT; DISADVANTAGED PERSONS;** and **EDUCATIONALLY DEPRIVED CHILDREN.**

**CULTURALLY DIFFERENT**—Students whose background and family culture (economic and social) are so different from the norm of the school, community, or nation that they may in some circumstances or in some localities require differentiated educational opportunities if they are to be educated to the level of their ability. (IIR, IVR-VR) *See also* **CULTURAL HANDICAP** and **DISADVANTAGED PERSONS.**

**CULTURALLY DISADVANTAGED**—*See* **CULTURALLY DIFFERENT; DISADVANTAGED PERSONS;** and **EDUCATIONALLY DEPRIVED CHILDREN.**

**CULTURE**—That complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society. (Unpublished VIII)

**CUMULATIVE STUDENT RECORD**—A continuous and current record of significant, factual information regarding the progress and growth of an individual student as he goes through school, generally including personal identifying data, selected family data, selected physical, health, and sensory data, standardized test data; membership and attendance data; and school performance data. (The cumulative student record should be maintained separately from special student services records and confidential reports from outside agencies.) (V-VR) *See also* **STUDENT RECORD; PERMANENT STUDENT RECORD; SPECIAL STUDENT SERVICES RECORD,** and **CONFIDENTIAL REPORTS FROM OUTSIDE AGENCIES.**

**CURRENT (fiscal year)**—The fiscal year in progress. (II, III, IIR)

**CURRENT ADDRESS (staff)**—The place where the staff member lives and may be reached during the time of his service to the school system. (IV, IVR)

**CURRENT ASSETS**—Cash or anything that can be readily converted into cash. (II-IIB, IIR)

**CURRENT EXPENDITURES**—The total charges incurred for the benefit of the current fiscal year, except for capital outlay and debt service. (II, III-VI-VR) *See also* **CURRENT EXPENSE.**

**CURRENT EXPENDITURES PER PUPIL IN ADA (REGULAR SCHOOL TERM)**—Current expenditures for the regular school term divided by the average daily attendance of full-time pupils (or full-time equivalency of pupils) during the term. (VI) *See also* **CURRENT EXPENDITURES** and **AVERAGE DAILY ATTENDANCE.**

**CURRENT EXPENDITURES PER PUPIL IN ADM (REGULAR SCHOOL TERM)**—Current expenditures for the regular school term divided by the average daily membership of full-time pupils (or full-time equivalency of pupils) during the term. (VI) *See also* **CURRENT EXPENDITURES** and **AVERAGE DAILY MEMBERSHIP.**

**CURRENT EXPENDITURES PER PUPIL IN ADA (SUMMER SCHOOL TERM)**—Current expenditures for the summer school term divided by the full-time equivalency of pupils in average daily attendance during the term. (VI) *See also* **CURRENT EXPENDITURES** and **FULL-TIME EQUIVALENCY.**

**CURRENT EXPENDITURES PER PUPIL IN ADM (SUMMER SCHOOL TERM)**—Current expenditures for the summer school term divided by the full-time equivalency of pupils in average daily membership during the term. (VI) *See also* **CURRENT EXPENDITURES** and **FULL-TIME EQUIVALENCY.**

**CURRENT EXPENDITURES PER STUDENT**—Current expenditures for a particular period of time divided by a student unit of measure. The term includes all charges, except for capital outlay and debt service, for specified school systems, schools, and/or program areas divided by the average daily membership of average daily attendance for the school systems, schools, and program areas involved. (II, V-VI-IIR, IVR-VR) *See also* **CURRENT EXPENDITURES.**

**CURRENT EXPENDITURES PER STUDENT PER DAY (ADA)**—The current expenditures per student in average daily attendance during a given school term, divided by the number of days school was in session during this term. (V, VI, VR) *See also* **CURRENT EXPENDITURES** and **AVERAGE DAILY ATTENDANCE.**

**CURRENT EXPENDITURES PER STUDENT PER DAY (ADM)**—The current expenditures per student in average daily membership during a given school term, divided by the number of days school was in session during this term. (V-VI, VR) *See also* **CURRENT EXPENDITURES** and **AVERAGE DAILY MEMBERSHIP**.

**CURRENT EXPENDITURES PER STUDENT PER HOUR COURSE MEETS (ADULT/CONTINUING EDUCATION)**—Current expenditures for adult education (for a given period of time) divided by aggregated student hours. The term *aggregated student hours* refers to the total hours, for all courses, or to the enrollment for each course times the number of hours the course meets. (NOTE: This item may be used in any situation where there is a significant proportion of part-time students.) (VI-VR) *See also* **CURRENT EXPENDITURES**.

**CURRENT EXPENSE**—Any expenditure except for capital outlay and debt service. Current expense includes total charges incurred, whether paid or unpaid. (I, II, III-IIR) *See also* **CURRENT EXPENDITURES**.

**CURRENT FUNDS**—Money received during the current fiscal year from revenue which can be used to pay obligations currently due, and surpluses reappropriated for the current fiscal year. (II, III-IIB-IIR)

**CURRENT LIABILITIES**—Debts which are payable within a relatively short period of time, usually no longer than a year. (II, IIB, IIR) *See also* **FLOATING DEBT**.

**CURRENT LOANS**—A loan payable in the same fiscal year in which the money was borrowed. (II, IIR) *See also* **TAX ANTICIPATION NOTES**.

**CURRENT YEAR'S TAX LEVY**—Taxes levied for the current fiscal period. (II, IIR)

**CURRICULUM**—The planned interaction of pupils with instructional *content*, instructional *resources*, and instructional *processes* for the attainment of educational objectives. (VI, VII, IVR)

**CURRICULUM GUIDE**—A written plan including one or more aspects of curriculum and instruction such as philosophy, policies, aims, objectives, subject matter, resources, and processes. Such a plan may be as narrow

in scope as a unit or topic of instruction, or as broad as the entire curriculum of a school system or level of instruction within a State. (VI, VII) *See also* **COURSE OF STUDY**.

**CURRICULUM SPECIALIST ASSIGNMENT**—An assignment to a staff member who has expertise in a specialized field to provide information and guidance to other staff members to improve the curriculum of an LEA. This assignment would include the curriculum consultant and curriculum supervisor. (IIR, IVR)

**CURTAILED SESSION**—A school session with less than the number of hours of instruction recommended by the State education agency. (V, VI, VR)

**CUSTODIAL MENTALLY RETARDED**—*See* **SEVERELY MENTALLY RETARDED**.

**CUSTODIAL SERVICE ROOM**—Custodial quarters, custodial service closets, and similar areas designed or adapted for use of the custodial staff. (III)

**CUSTODIAL SERVICES** (subject matter)—*See* appendix, p. 257.

**CUSTODIAL SERVICES RESPONSIBILITY**—The area of responsibility for cleaning the buildings of school plants or supporting services facilities, operating such equipment as heating and ventilating systems, preserving the security of school property, and keeping the school plant safe for occupancy and use. It consists of such activities as cleaning, sweeping, disinfecting, heating, lighting, moving furniture, keeping school entrances appropriately locked or unlocked, keeping such facilities as fire escapes and panic bars in working order, and watchman duties. (IV)

**CUSTODIAN**—A staff member performing assigned activities in school plant housekeeping, servicing school plant equipment, and maintaining the security of the school plant. Such staff members as janitor, assistant custodian, janitress, maid, matron, sweeper, cleaner, attendant, watchman, guard, boiler fireman, and heating and ventilating equipment operator are included in this definition. (IV)

**CUSTODIAN ASSIGNMENT**—An assignment to perform LEA plant housekeeping, servicing, and security services consisting of such activities as cleaning; operating heating, ventilating, and air-conditioning systems; guarding and caring for school property; and servicing building equipment. (IV, IIR, IVR)

**CUSTODY AND CARE OF CHILDREN**—The custodial care of children in residential day schools, or child care centers which are not part of, or directly related to, the instructional program, and where the attendance of the children is not included in the attendance figures for the LEA. (IVR)

**CYCLE SCHEDULING**—A scheduling plan, usually in junior high schools, wherein courses which might be taught one or two periods each week throughout the term are taught every day for a succession of weeks. For example, art, music, and industrial arts might be "cycled" in a 36-week term for 12 weeks each. (VI)

## D

**D1, D2, D3, . . . D19**—Symbols used to identify students who discontinue or drop out of school, according to reason, as follows:

- D1 - Physical Illness
- D2 - Physical or Sensory Disability
- D3 - Emotional Disturbance
- D4 - Mental Retardation
- D5 - Behavioral Difficulty
- D6 - Academic Difficulty
- D7 - Lack of Appropriate Curriculum
- D8 - Poor Student-Staff Relationships
- D9 - Poor Relationships with Fellow Students
- D10 - Dislike of School Experiences
- D11 - Parental Influence
- D12 - Need at Home
- D13 - Economic Reasons
- D14 - Employment
- D15 - Marriage
- D16 - Pregnancy
- D17 - Religion
- D18 - Other Known Reason
- D19 - Reason Unknown
- D20 - New Residence, School Status Unknown (V-VR)

**DAILY SESSION**—See SESSION.

**DATA BANK**—A comprehensive collection of data, usually in machine-usable form (such as punch cards, tapes, and discs), which can be used for such purposes as drawing subsamples for special studies, checking hypotheses not formulated or tested previously, facilitating historical studies, and deriving summations and correlations. Typically, an educational data bank is comprised of component files relating to specific areas

of information such as pupils, staff, property, finance, instructional programs, and the community. (VI, IIR, IVR)

**DATA PROCESSING**—The activities of collecting and organizing data, storing for future use, and preparing statistical reports. (IV-IIR, IVR) See also MACHINE DATA PROCESSING and AUTOMATIC DATA PROCESSING.

**DATA PROCESSING AND COMPUTER OPERATION** (subject mater)—See appendix, p. 156.

**DATA PROCESSING SERVICES**—Activities concerned with preparing data for storage, storing data, and retrieving them for reproduction as information for management and reporting. (VI-IVR)

**DATE OF ACQUISITION**—For purchased property and property received as a gift or donation, the date on which the school district or unit operating the schools consummated the transfer of ownership of a piece of property (land, buildings, or equipment) For property constructed by school district employees, it is the date construction was completed as acceptable. For leased or rented property, this date is the date on which the lease or rent begins. (III)

**DATE OF DISPOSAL**—The date on which a piece of property (land, buildings, or equipment) was sold or otherwise disposed of so that the school district no longer retains it for any purpose. When the actual date of a loss or theft is not known, the date of disposal is the date the loss or theft is noted. (III)

**DATE OF WITHDRAWAL FROM MEMBERSHIP**—The first day after the date of last attendance, if known; otherwise, the date of withdrawal is considered to be the date on which it becomes known officially that the student left. (VR)

**DATES OF CONSTRUCTION**—There are two dates of construction: (1) the date of construction contract which is the date the construction contract was signed with the contractor and (2) the date of acceptance which is the date the construction was completed as acceptable. (III)

**DAY ACTUALLY TAUGHT**—See DAY IN SESSION.

**DAY CARE CENTER**—A center under professional guidance designed to provide care for prekindergarten

children of working mothers and others while providing, at the same time, educational experiences for the children. (VR)

**DAY IN SESSION**—A day on which the school is open and the students are under the guidance and direction of teachers. On some days the school plant may be closed and the student body as a whole engaged in school activities outside the school plant under the guidance and direction of teachers. Such days should be considered as days in session. Days on which the teaching facility is closed for such reasons as holidays, teachers' institutes, and inclement weather should *not* be considered as days in session. (I, II-IV, V, VII-III, IVR-VR)

**DAY OF ABSENCE**—A schoolday during which a student is in membership but not in attendance (i.e., nonattendance of a student on a day when school is in session). (V, VR) *See also* ABSENCE.

**DAY OF ATTENDANCE**—A schoolday during which a student is present for an entire school session under the guidance and direction of teachers. When a student is present for only part of the session, his attendance should be counted according to the nearest half day of attendance. If overcrowded conditions make it necessary for a school to hold two separate sessions per day, a student attending for all of either session should be considered as having completed a full day of attendance. An excused absence during examination periods or because of sickness or for any other reason should not be counted as a day of attendance. Attendance at a State-approved half day session for kindergarten or prekindergarten also should be considered as a full day of attendance; for example, if one group of 100 pupils attends a prekindergarten in the morning and a different group of 100 pupils attends in the afternoon, the aggregate attendance for the day is 200. However, when computing ratios for various purposes, persons attending curtailed sessions should be counted as if they were in attendance for a portion of the session. For example (for purposes of obtaining statistical comparability *only*), student-staff ratios involving kindergarten and prekindergarten students attending a half-day session are computed as though these students were in attendance for a half day. (I, II-V, VII-III, IVR-VR) *See also* ATTENDANCE.

**DAY OF MEMBERSHIP**—For a given pupil, any day that school is in session from the date the pupil presents himself at school and is placed on the current

roll until he withdraws from membership in the class or school. (V) *See also* MEMBERSHIP.

**DAY SCHOOL**—A school attended by students during a part of the day, as distinguished from a residential school where students are boarded and lodged as well as taught. (V, VI, VR)

**DAY SCHOOL FACILITY**—*See* DAY SCHOOL.

**DAY STUDENT**—A student who attends the majority of his classes during the daytime hours, as defined by the institution. (VR)

**DEAF**—A condition in which hearing is extremely defective so as to be essentially nonfunctional for the ordinary purposes of life. (VR)

**DEBIT**—An entry in the left side of a "T" account. (IIB)

**DEBT, AMORTIZATION OF**—*See* AMORTIZATION OF DEBT.

**DEBT, BONDED**—*See* BONDED DEBT.

**DEBT, FLOATING**—*See* FLOATING DEBT.

**DEBT, FUNDED**—*See* FUNDED DEBT.

**DEBT FUND**—A fund which is used to finance the payment of principal and interest on debt. (IIB)

**DEBT LIMIT**—The maximum amount of gross or net debt legally permitted. (III)

**DEBT SERVICE**—Expenditures for the retirement of debt and expenditures for interest on debt, except principal and interest of current loans. (I-II, III, VII, IIR) *See also* CURRENT LOANS.

**DEBT SERVICE FUND**—Accounts for payment of interest and principal on all general obligation debt. Does not include money payable exclusively from special assessments or revenue debt issued for and services by a government enterprise. (IIR)

**DEED REFERENCES**—Information pertaining to the location of a deed, usually indicating where a copy of the deed is on file, the volume and page number of the book in which recorded, and the number of the deed. (III)

**DEFERRED CHARGES**—Expenditures which are not chargeable to the fiscal period in which made but are carried on the asset side of the balance sheet pending amortization or other disposition. Deferred charges differ from prepaid expenses in that they usually extend over a long period of time and may or may not be regularly recurring costs of operation. (II, IIR) *See also* PREPAID EXPENSES.

**DEFICIT**—The excess of the obligations of a fund over the fund's resources. (II, IIB, IIR)

**DEGREE**—A title conferred by a college or university as official recognition for the completion of a program of studies or for other attainment. (IV, V, VI, VII, IVR)

**DELICATE**—*See* SPECIAL PHYSICAL HEALTH PROBLEMS.

**DELINQUENT BEHAVIOR**—Behavior of a juvenile which is habitually wayward, disobedient, truant, or of such a nature as to impair or endanger the morals or health of self or others. If a juvenile violates a law or ordinance and is convicted in a court of law as a juvenile, he sometimes is considered a juvenile delinquent, depending on the severity of the violation; for repeated convictions of lesser offenses, he usually is considered a juvenile delinquent. Some jurisdictions use a term other than "conviction" in juvenile cases. (V, VI, VR)

**DELINQUENT TAXES**—Taxes remaining unpaid on and after the date on which they become delinquent by statute. (II, IIR)

**DEMOGRAPHIC STUDIES**—Studies pertaining to vital statistics such as births, deaths, marriages, ethnic groups, and mobility of populations. (VII)

**DEMOLITION WORK**—The razing of buildings to permit new construction or use of the land for other purposes. (III)

**DEMONSTRATION**—An explanation by example or experiment; a practical showing of how something works or is used. (VI-VII)

**DEMOTION**—A change of a student's grade placement from a higher to a lower grade; the opposite of promotion. (V, VR) *See also* PROMOTION.

**DENSITY INDEX**—A quotient which is determined by dividing the total number of pupils transported by the total number of miles of public roads in the district. (Unpublished VIII)

**DENTAL** (subject matter)—*See* appendix, p. 185.

**DENTAL HEALTH SERVICES RESPONSIBILITY**—The area of responsibility for providing dental services which are not direct instruction. (IV)

**DENTAL HYGIENIST**—A staff member who is licensed to perform technical dental hygiene services, such as the cleaning and care of teeth and gums, and who is providing these services within the school system. (IV)

**DENTAL HYGIENIST ASSIGNMENT**—An assignment to a staff member who is licensed as a dental hygienist to perform dental prophylactic treatments and to instruct others in the care of teeth and mouth. (IV-IIR, IVR)

**DENTAL SERVICES**—Activities associated with dental screening, dental care, and orthodontic activities. (IIR, IVR)

**DENTIST**—A staff member who is licensed to practice dentistry, and who is providing dental services within the school system. (IV)

**DENTIST ASSIGNMENT**—An assignment to a staff member who is licensed as a dentist to diagnose and treat diseases, injuries, and malformations of the teeth and gums. (IV-IIR, IVR)

**DEPARTMENT**—An administrative subdivision with a teaching staff responsible for instruction in a particular subject-matter area or field of study. (IV, V-VI, VR)

**DEPARTMENT HEAD (OR CHAIRMAN)**—A staff member performing assigned activities in directing and managing a designated division of the instructional program in a school. (IV)

**DEPARTMENT OF DEFENSE OVERSEAS DEPENDENTS SCHOOL**—An elementary or secondary school operated for dependents of active duty military and civilian personnel of the U.S. Department of Defense who are stationed overseas. (VR)

**DEPARTMENTALIZED ORGANIZATION**—The or-



ganization of instruction in such a way that teachers specialize in one or two subject-matter areas and give instruction in these areas to several classes. Under the departmentalized organization, pupils or teachers move from room to room for different classes during the school day. (IV, V-VI)

**DEPENDENT**—A person (e.g., spouse, child, or relative) who depends upon the staff member for support, and who is recognized as a dependent for such purposes as income tax, salary differential, or other purposes recognized by the school system. (IV)

**DEPOSITS**—Funds deposited by the LEA as a prerequisite to receiving services and/or goods. (IIR)

**DEPOSITS PAYABLE**—Liability for deposits received as a prerequisite to providing or receiving services and/or goods. (IIR)

**DEPRECIATION**—Loss in value or service life of fixed assets because of wear and tear through use, elapse of time, inadequacy, or obsolescence. (II, III, IIR)

**DESCRIPTIVE COURSE TITLE**—In a departmentalized organization, the descriptive title by which a course is identified (e.g., American History, English III); in a self-contained class, any portion of the instruction for which a mark is assigned or a report is made (e.g., reading, composition, spelling, etc., or language arts). (VR)

**DESCRIPTIVE HEADING**—A heading under which record items that are similar in terms of a given reference are shown and which are in part described by the heading. (IV)

**DEVELOPED AREA**—Land that has been worked over and improved for specified purposes. (III) *See also* IMPROVEMENTS TO SITE.

**DEVELOPMENT**—Activities concerned with the evolving process of utilizing the products of research and considered judgment in the deliberate improvement of educational programs. (VII, IIR, IVR)

**DEVELOPMENTAL READING PROGRAM** (subject matter)—*See* appendix, p. 173.

**DIAGNOSTIC READING TEST**—An examination giving in-depth information about specific weaknesses in a person's reading skills that must be remedied before

the person can be expected to make normal progress in his schoolwork. (VR)

**DIAGNOSTIC TEACHER**—A teacher possessing special training and skills in diagnosing learning problems of individuals and in planning and providing therapeutic educational programs based on such diagnoses. (VI)

**DIESEL MECHANIC** (subject matter)—*See* appendix, p. 257.

**DIETITIAN**—A staff member performing assigned activities concerned with planning menus and special diets. (IV)

**DIETITIAN/NUTRITIONIST ASSIGNMENT**—An assignment to plan and direct food services, programs, including determining the nutritional value of food for meals. (IIR, IVR)

**DIFFERENTIALIZED CURRICULUM FOR HANDICAPPED PUPILS** (subject matter)—*See* appendix, p. 267.

**DIFFERENTIATED CURRICULUM**—A program of educational offerings designed to meet the unique needs of pupils comprising special target populations. (VII)

**DIFFERENTIATION**—A plan making provision for individualized needs of the various pupils by enrichment or other modification of a common basic program. (VI)

**DIRECT COSTS**—Those elements of cost which can be easily, obviously, and conveniently identified with specific activities or programs, as distinguished from those costs incurred for several different activities or programs and whose elements are not readily identifiable with specific activities. (VII, IIR, IVR) *See also* INDIRECT COSTS.

**DIRECT EXPENSES**—*See* DIRECT COSTS.

**DIRECT SERVICES**—Activities identifiable with a specific program. These are direct services for a particular program. Those activities concerned with the teaching-learning process are considered to be direct services for instruction. (IIR, IVR)

**DIRECT STUDENT-TEACHER INTERACTION**—In-

struction by one or more teachers physically present, e.g., by a single teacher or by a team of two or more teachers. (V-VI, VR)

**DIRECT TEACHER CONTACT**—*See* DIRECT STUDENT-TEACHER INTERACTION.

**DIRECTOR**—A staff member performing assigned activities having the purpose of expediting and directing an operation of the school system for which policy and program plans have been broadly established. (IV)

**DISADVANTAGED PERSONS**—Unless defined differently for specific educational programs (e.g., vocational education, consumer, and homemaking programs), persons who have academic, socioeconomic, cultural, or other handicaps that prevent them from succeeding in educational programs designed for persons without such handicaps; and who, for that reason, require specially designed educational programs and related services. The term includes persons whose needs for such programs or services result from poverty, neglect, delinquency, or cultural, racial, or linguistic isolation from the community at large. The term does not include physically or mentally handicapped persons except where such persons also are subject to the other handicaps and conditions referred to in this paragraph. (VR) *See also* HANDICAPPED CHILDREN.

**DISBURSEMENTS**—Payments in Cash. (II, VII, IIR) *See also* CASH.

**DISCIPLINE**—A broad, logically organized body of subject matter which is distinguished by its scholarly prestige. (VI)

**DISPATCHER**—A staff member performing the activities of assigning vehicles and drivers to perform specific services and recording such information concerning vehicle movement as the school system may require. (IV)

**DISPATCHING ASSIGNMENT**—An assignment to assign vehicles and drivers to perform specific services and to record such information concerning vehicle movement as the LEA may require. (IIR, IVR)

**DISSEMINATION OF INFORMATION**—The transmitting of pertinent educational information to the educational community, the general public, the State legislature, the Federal Government, or the various news media. (VII)

**DISTRIBUTIVE EDUCATION** (subject matter)—*See* appendix, p. 163.

**DISTRICT, SCHOOL**—*See* SCHOOL DISTRICT.

**DOCTOR'S DEGREE**—A graduate degree granted upon the completion of from 2 to 3 years of graduate work and proved ability in research attested by a dissertation or other evidence. (IV-IVR)

**DOCTORAL DEGREE**—*See* DOCTOR'S DEGREE.

**DOUBLE ENTRY**—A system of bookkeeping which requires for every entry made to the debit side of an account or accounts an entry for the corresponding amount or amounts to the credit side of another account or accounts. (II-IB-VII, IIR).

**DOUBLE (2) SESSIONS**—A school day consisting of separate sessions for two groups of pupils in the same instructional space, e.g., one room used by one fourth-grade class in the morning and by another fourth-grade class in the afternoon; or one school building used by high school juniors and seniors during a morning session and by freshmen and sophomores during an afternoon session. (V-VI)

**DRAFTING** (subject matter)—*See* appendix, p. 200.

**DRAFTING OCCUPATIONS** (subject matter)—*See* appendix, p. 257.

**DRAFTSMAN**—A special member performing assigned technical activities in the preparation of clear, complete, and detailed working plans and drawings for engineering, manufacturing, or construction purposes. (IV)

**DRAMATIC ARTS** (subject matter)—*See* appendix, p. 180.

**DRIVER EDUCATION** (subject matter)—*See* appendix, p. 279.

**DRIVER EDUCATION VEHICLE**—A vehicle used in driver education programs for instruction in operation, safety, and similar areas. (III)

**DROPOUT**—A student who leaves a school, for any reason except death, before graduation or completion of a program of studies and without transferring to another school. The term "dropout" is used most often

to designate an elementary or secondary school student who has been in membership during the regular school term and who withdraws from membership before graduating from secondary school (grade 12) or before completing an equivalent program of studies. Such an individual is considered a dropout whether his dropping out occurs during or between regular school terms, whether his dropping out occurs before or after he has passed the compulsory school attendance age, and, where applicable, whether or not he has completed a minimum required amount of schoolwork. The term "dropout" is used synonymously with the term "discontinuer." (V-VR)

**DROPPING OUT**—Leaving a school, for any reason except death, before graduation or completion of a program of studies and without transferring to another school. (V)

**DUAL ENROLLMENT**—An arrangement whereby a student regularly and concurrently attends two schools which share direction and control of his studies. For example, the student attends a public school part-time and a nonpublic school part-time, pursuing part of his elementary or secondary studies under the direction and control of the public school and the remaining part under the direction and control of the nonpublic school; or, he attends a public secondary school part-time and an area vocational school part-time with the direction and control of his studies similarly shared by the two institutions. (VI, VII, VR)

**DUE FROM "A" FUND**—An asset account used to indicate amounts owed to a particular fund by another fund in the same LEA for goods sold or services rendered. It is recommended that separate accounts be maintained for each interfund receivable. (IIR)

**DUE FROM "A" GOVERNMENT**—Amounts due to the reporting governmental unit from another governmental unit. These amounts may represent grants-in-aid, shared taxes, taxes collected for the reporting unit by another unit, loans, and charges for services rendered by the reporting unit for another government. It is recommended that separate accounts be maintained for each interfund receivable. (IIR)

**DUE TO "A" FUND**—A liability account used to indicate amounts owed by a particular fund to another fund in the same LEA for goods and services rendered. It is recommended that separate accounts be maintained for each interfund receivable. (IIR)

**DUE TO "A" GOVERNMENT**—Amounts owed by the reporting LEA to the named governmental unit. It is recommended that separate accounts be maintained for each interfund receivable. (IIR)

**DUE TO FISCAL AGENT**—Amounts due to fiscal agents, such as commercial banks, for servicing an LEA's maturing indebtedness. (IIR)

**DUES AND FEES**—Costs of memberships or assessments in professional or other organizations and payments to paying agents for services rendered. (IIR)

## E

**EARLY CHILDHOOD EDUCATION**—Educational experiences provided by the school at the preprimary and primary levels. (VI, VII, IVR)

**EARLY DEPARTURE**—Leaving school before the official close of the school's daily session. (V-VR)

**EARNED INTEREST**—Interest collected or due. (II, IIR)

**EARNINGS**—The sum of wage and salary income and net self-employment income. (Unpublished VIII)

**EARTH-SPACE SCIENCES (INCLUDING GENERAL EARTH-SPACE SCIENCE)** (subject matter)—See appendix, p. 228.

**ECONOMIC GEOGRAPHY** (subject matter)—See appendix, p. 157.

**ECONOMICS** (subject matter)—See appendix, p. 157.

**EDITING ASSIGNMENT**—An assignment to select, write, and review materials for publication. (IIR, IVR)

**EDUCABLE MENTALLY RETARDED**—Mentally retarded individuals who are educable in the academic, social, and occupational areas, even though moderate supervision may be necessary. (V-VI, VR)

**EDUCATION, ADULT**—See ADULT EDUCATION.

**EDUCATION, ADULT BASIC**—See ADULT BASIC EDUCATION.

**EDUCATION, ADULT/CONTINUING**—See ADULT/CONTINUING EDUCATION.

- EDUCATION, BASIC—*See* BASIC EDUCATION.
- EDUCATION, BOARD OF—*See* BOARD OF EDUCATION.
- EDUCATION, COMMUNITY—*See* COMMUNITY EDUCATION.
- EDUCATION, COMMUNITY SERVICE—*See* COMMUNITY SERVICE EDUCATION.
- EDUCATION, CONSUMER—*See* CONSUMER EDUCATION.
- EDUCATION, CONTINUING—*See* ADULT/CONTINUING EDUCATION.
- EDUCATION, COOPERATIVE—*See* COOPERATIVE EDUCATION.
- EDUCATION, COOPERATIVE EXTENSION—*See* COOPERATIVE EXTENSION EDUCATION.
- EDUCATION, DISTRIBUTIVE—*See* DISTRIBUTIVE EDUCATION.
- EDUCATION, DRIVER—*See* DRIVER EDUCATION.
- EDUCATION, EARLY CHILDHOOD—*See* EARLY CHILDHOOD EDUCATION.
- EDUCATION, FEDERAL AID FOR—*See* FEDERAL AID FOR EDUCATION.
- EDUCATION, HEALTH OCCUPATIONS—*See* HEALTH OCCUPATIONS EDUCATION.
- EDUCATION, INDIAN—*See* INDIAN EDUCATION.
- EDUCATION, MIGRANT—*See* MIGRANT EDUCATION.
- EDUCATION, OUTDOOR—*See* OUTDOOR EDUCATION.
- EDUCATION, POSTSECONDARY—*See* POSTSECONDARY EDUCATION.
- EDUCATION, PREVOCATIONAL—*See* PREVOCATIONAL EDUCATION.
- EDUCATION, PUBLIC ADULT—*See* PUBLIC ADULT EDUCATION.
- EDUCATION, PUBLIC BOARD OF—*See* PUBLIC BOARD OF EDUCATION.
- EDUCATION, SPECIAL—*See* SPECIAL EDUCATION.
- EDUCATION, STATE BOARD OF—*See* STATE BOARD OF EDUCATION.
- EDUCATION, STATE DEPARTMENT OF—*See* STATE DEPARTMENT OF EDUCATION.
- EDUCATION, STATE SYSTEM OF—*See* STATE SYSTEM OF EDUCATION.
- EDUCATION, TECHNICAL—*See* TECHNICAL EDUCATION.
- EDUCATION, VOCATIONAL-TECHNICAL—*See* VOCATIONAL-TECHNICAL EDUCATION.
- EDUCATIONAL COMMUNITY—That body of persons, usually considered to be nationwide, which is actively engaged in the educational enterprise. (VII)
- EDUCATIONAL COUNSELING—A counseling process in which the pupil is assisted in planning and preparing for his immediate and future educational program. (VI)
- EDUCATIONAL MEDIA—Any device, content material, method, or experience used for teaching and learning purposes. These include printed and non-printed sensory materials. (VII, IIR, IVR) *See also* AUDIOVISUAL AIDS.
- EDUCATIONAL MEDIA SERVICES—Activities concerned with the use of all teaching and learning resources, including hardware and content materials. Educational media are defined as any devices, content materials, methods, or experiences used for teaching and learning purposes; these include printed and nonprinted sensory materials. (IIR, IVR)
- EDUCATIONAL PARK—A reasonably large tract of land (80-100 acres) containing schools serving kindergarten through high school-aged students and, perhaps a community college located in the inner ring of the suburbs or just inside the central city boundary. It is designed to serve a portion of the metropolitan area. It would contain 12,000 to 15,000 public school students of various ethnic groups. Concentration of facilities would make possible large-scale or special facilities such as swimming pools, auditoriums, or theatres. A

campus-like atmosphere for adults and children would include family recreational and educational facilities. It is designed to provide a school in the community and to improve the aesthetic environment of schools and urban areas. (Unpublished)

**EDUCATIONAL SPECIFICATIONS DEVELOPMENT SERVICES**—Activities concerned with preparing and interpreting to architects and engineers descriptions of specific space requirements for the various learning experiences of pupils to be accommodated in a building. These specifications are interpreted to the architects and engineers in the early stages of blueprint development. (IIR, JVR)

**EDUCATIONAL TELEVISION SERVICES**—Activities concerned with planning, programing, writing, and presenting educational programs or segments of programs by way of closed circuit or broadcast television. (IIR, IVR)

**EDUCATIONAL TV**—Providing television programs as a part of the instructional program of the school or LEA. It includes writing, programing, and directing educational-television programs. (IIR, IVR)

**EDUCATIONALLY DEPRIVED CHILDREN**—As defined for Federal compensatory education programs, those children who have need for special assistance in order that their level of educational attainment may be raised to that appropriate for children of their age. The term includes children who are handicapped or whose needs for such special educational assistance result from poverty, neglect, delinquency, or cultural or linguistic isolation from the community at large. (VR)

**ELECTION SERVICES**—Activities pertaining to services rendered in connection with any LEA election, including elections of officers, bond elections, and budget and appropriation elections. (IIR, IVR)

**ELECTIONS**—Services rendered in connection with any LEA election, including elections of officers, bond elections (regardless of whether or not the bond issues pass), and budget and appropriation elections. (IIR, IVR)

**ELECTRICAL OCCUPATIONS** (subject matter)—See appendix, p. 258.

**ELECTRICIAN ASSIGNMENT**—An assignment to perform activities involved with planning layout and

installing and repairing wiring, electrical fixtures, apparatus, and control equipment. (IIR, IVR)

**ELECTRICITY/ELECTRONICS** (subject matter)—See appendix, p. 201.

**ELECTRONICS OCCUPATIONS** (subject matter)—See appendix, p. 258.

**ELEMENTARY AND SECONDARY SCHOOL PLANT**—See COMBINED ELEMENTARY AND SECONDARY SCHOOL PLANT.

**ELEMENTARY FUNCTIONS** (subject matter)—See appendix, p. 213.

**ELEMENTARY INSTRUCTIONAL LEVEL**—The general level of instruction provided for pupils in elementary schools, and any instruction of a comparable nature and difficulty provided for adults and youth beyond the age of compulsory school attendance. (IV, V-VI, IIR, IVR)

**ELEMENTARY PROGRAMS**—Learning experiences concerned with the knowledge, skills, appreciations, attitudes, and behavioral characteristics which are considered to be needed by all pupils in terms of their awareness of life within our culture and the world of work and which normally may be achieved during the elementary school years as defined by applicable State laws and regulations. (IIR-IVR)

**ELEMENTARY SCHOOL**—A school classified as elementary by State and local practice and composed of any span of grades not above grade 8. A preschool or kindergarten school is included under this heading only if it is an integral part of an elementary school or a regularly established school system. (I, II, III-IV, V-VI-IIR, IVR-VR)

**ELEMENTARY SCHOOL INDUSTRIAL ARTS** (subject matter)—See appendix, p. 201.

**ELEMENTARY SCHOOL MATHEMATICS (K-6)** (subject matter)—See appendix, p. 206.

**ELEMENTARY SCHOOL PLANT**—A plant that houses on a permanent basis one school only—a school classified as elementary by State and local practice and composed of any span of grades below grade 9. (III)

**ELEVATOR OPERATING ASSIGNMENT**—An assign-

ment to transport passengers and freight between the floors of a building via elevator. (IIR, IVR)

**EMANCIPATED MINOR**—A minor who is free (emancipated) from parental control and thereby is exempted from the provisions of compulsory school attendance. (VR)

**EMERGENCY PROGRAMS, STATE EDUCATION AGENCIES**—Those programs, other than the operation of schools, which were established to cope with conditions of pressing necessity and are not considered a permanent part of the activities of a State education agency. Illustrations are the State administration of the Veterans Program, Surplus Property, etc. (I)

**EMOTIONAL HANDICAP**—An impairment or deficiency of the emotions that adversely affects the stability and/or performance of an individual. (V-VI)

**EMOTIONALLY DISTURBED**—See **SERIOUSLY EMOTIONALLY DISTURBED**.

**EMPLOYEE BENEFITS**—Compensation, in addition to regular salary, provided to an employee. This may include such benefits as health insurance, life insurance, annual leave, sick leave, retirement, and social security. (VII, IIR, IVR)

**EMPLOYMENT PERMIT**—A type of legal certificate, sometimes called a "work permit," authorizing youths to engage in certain types of work before they have reached the age of unrestricted employment. (V-VR)

**EMPLOYMENT STATUS**—The circumstances under which the staff member serves the school system (e.g., probationary status, tenure status, or other status). (IV, IVR)

**ENCUMBRANCES**—Purchase orders, contracts, and salary or other commitments which are chargeable to an appropriation and for which a part of the appropriation is reserved. They cease to be encumbrances when paid or when actual liability is set up. (II-IIB-VII, IIR)

**ENDOWMENT FUND**—A fund from which the income may be expended, but whose principal must remain intact. (II, VII, IIR)

**ENGINEER**—A staff member performing assigned professional engineering activities in such fields as civil engineering, electrical engineering, mechanical engi-

neering, and structural engineering. Engineers performing professional engineering activities usually meet the licensing requirements for their respective fields of engineering. Staff members who have the title "engineer," but who perform such assigned activities as those of plant engineer or building engineer, and who do not perform assigned professional engineering activities are not included in this definition. (IV)

**ENGINEER ASSIGNMENT**—An assignment to a staff member who is licensed as an engineer to perform activities such as designing and preparing plans and specifications for sites, building structures, and service systems, and supervising their development, construction, operation, maintenance, and improvement. (IVR)

**ENGINEERING-RELATED TECHNOLOGY** (subject matter)—See appendix, p. 246.

**ENGLISH LANGUAGE ARTS** (subject matter)—See appendix, p. 172.

**ENGLISH (SOCIO-CULTURAL DIALECT)**—A variation of the English language spoken in the United States by many members of a distinct socio-cultural group, such as Afro-Americans, Chicanos, Puerto Ricans, and Appalachian mountaineers. Such variations of English—generally denoted as non-standard—differ from regional standard variations (and from each other) in regard to grammar as well as pronunciation and idiomatic usage. (VR)

**ENGLISH (STANDARD AMERICAN)**—The English language as spoken in such mainstream institutions of the United States as governmental bodies, schools, churches, and communications media. While there are regional variations of Standard American English (e.g., Southern standard and New England standard), the grammar of these regional variations is similar, and the differences between them are predominantly those of pronunciation and idiomatic usage. (VR)

**ENRICHMENT PROGRAM**—Supplementary instructional experiences provided pupils according to their special needs, abilities, and interest. For preschool or preprimary culturally deprived children, this refers to experiences designed to aid in their transition from home to a school environment; emphasis is on language development in preparation for reading instruction; and, frequently, such programs are supplemented by counseling with parents and with home visits by school staff members. For other pupils, such as the gifted,

talented, or college bound, this term refers to special instructional experiences provided in addition to instructions generally provided most pupils. (VI, IIR, IVR)

**ENROLLMENT**—The total number of original entries in a given school unit. In a given State, this is the total number of original entries in public schools plus the total number of original entries in nonpublic schools. (See definition of "Original Entry.") (I)

**ENROLLMENT INFORMATION**—Information relative to the entrance of pupils into schools and classes, their membership (including attendance, absence, and tardiness), and their withdrawals (including completion of schoolwork, transfer, dropout, and death). (V)

**ENTRY**—The record of a financial transaction in its appropriate book of accounts. Also the act of recording a transaction in the books of accounts. (IIB-IIR)

**ENTRY, ORIGINAL**—See ORIGINAL ENTRY.

**ENUMERATION DATE**—The specific date upon which the census is taken. (Unpublished VIII)

**ENUMERATION DISTRICT**—A small area assigned to one census enumerator to be canvassed and reported separately. The average enumeration district contains approximately two hundred housing units. (Unpublished VIII)

**ENVIRONMENTAL HEALTH (subject matter)**—See appendix, p. 187.

**EQUIPMENT**—Any instrument, machine, apparatus, or set of articles which (a) retains its original shape and appearance with use and (b) is non-expendable, i.e., if the article is damaged or some of its parts are lost or worn out, it is usually more feasible to repair it than to replace it with an entirely new unit. (II, III, IV-VI, VII, IIR, IVR)

**EQUIPMENT, BUILT-IN**—See BUILT-IN EQUIPMENT.

**EQUIPMENT, MOVABLE**—See MOVABLE EQUIPMENT.

**EQUIPMENT IN STORAGE**—Equipment that is not in actual service on some regular or periodic basis, but is being held for future use or disposal. (III)

**EQUIPMENT IN USE**—Equipment that is in actual service on some regular or periodic basis. (III) See also EQUIPMENT and EQUIPMENT IN STORAGE.

**EQUITY**—The mathematical excess of assets over liabilities. Generally this excess is called Fund Balance. (IIB, IIR)

**EQUIVALENCY EXAMINATION**—See HIGH SCHOOL EQUIVALENCY EXAMINATION.

**ESKIMO**—A member of a cultural group of Oriental origins living primarily in Greenland, northern Canada, Alaska, and the northeastern tip of Asia. (VR)

**ESTIMATED LIFE**—The estimated number of years that a given property item will be able to perform its functions in a satisfactory manner in view of the conditions to which it will be subjected. (III)

**ESTIMATED NUMBER OF STUDENTS IN A SPECIFIED PARTICIPATING SCHOOL WHO ARE ELIGIBLE FOR FREE OR REDUCED-PRICE TYPE A LUNCHES UNDER THE APPROVED ELIGIBILITY STANDARDS FOR SUCH LUNCHES**—(As required under Section 11 of the National School Lunch Act of 1946, as amended, this number is reported semiannually, based on October and March data.) (VR)

**ESTIMATED REVENUE**—On an accrual basis, the amount of revenue estimated to accrue during a given period regardless of whether or not it is all to be collected during the period; on a cash basis, the amount of revenues estimated to be collected during a given period. (II-IIB-IIR)

**ESTIMATED UNCOLLECTIBLE TAX LIENS**—That portion of tax liens receivable which it is estimated will never be collected. The account is shown as a deduction from the Tax Liens Receivable account on the balance sheet in order to arrive at the net amount of tax liens receivable. (IIR)

**ESTIMATED UNCOLLECTIBLE TAXES**—A provision of tax revenues for that portion of taxes receivable which it is estimated will not be collected. The account is shown on the balance sheet as a deduction from the Taxes Receivable account in order to arrive at the net taxes receivable. Separate accounts may be maintained on the basis of tax roll year and/or delinquent taxes. (IIR)

**ETHNIC GROUP**--A group with a common cultural tradition and a sense of identity which exists as a subgroup of a larger society. (Unpublished VIII)

**ETHNIC ORIGIN**--The ethnic origin of various pupil groups, according to State or local classification and definition, e.g., Mexican-American, Japanese-American, and Puerto Rican-American. (VI) *See also* **ETHNIC GROUP**.

**EVALUATING ASSIGNMENT**--An assignment to determine the value or effect of plans, programs, and activities by appraisal of data in light of specified goals and objectives. (IIR, IVR)

**EVALUATION**--The process of ascertaining or judging the value or amount of an action or an outcome by careful appraisal of previously specified data in light of the particular situation and the goals and objectives previously established. (VII, IIR, IVR)

**EVALUATION SERVICES**--Activities concerned with ascertaining or judging the value or amount of an action or an outcome by careful appraisal of previously specified data in light of the particular situation and the goals and objectives previously established. (IIR, IVR)

**EVENING COLLEGE**--The division of an institution offering a program of college-level study in late afternoon or evening intended primarily for adults (but also servicing day-time students) and usually under a separate administrative unit. (Unpublished IX)

**EVENING STUDENT**--A student who attends the majority of his classes during the evening hours, as defined by the institution. (VR)

**EXCEPTIONAL CHILDREN**--Children who, because of certain atypical characteristics, have been identified by professionally qualified personnel as requiring special educational planning and services, whether or not such services are available. In general, the term "exceptional children" considers exceptionality on the basis of (a) physical, health, or sensory handicap, (b) emotional handicap or behavioral problem, and (c) observable exceptionality in mental ability, i.e., mentally gifted and mentally retarded. Some exceptional children have more than one type of exceptionality. (I, III-V-VI, IVR-VR)

**EXCEPTIONAL PUPILS**--Exceptional children, and

adults identified as exceptional, receiving instruction in a program of special education. (V, VI, IVR) *See also* **EXCEPTIONAL CHILDREN** and **SPECIAL EDUCATION**.

**EXCEPTIONALITY**--A physical, health, sensory, mental, psychological, or proficiency characteristic by which qualified professional personnel identify individuals as differing significantly from others in their age group. (V, VI, IVR-VR)

**EXCESS MEMBERSHIP IN PUBLIC SCHOOLS**--Membership in excess of the normal student capacity of accessible publicly-owned school plants in use. This includes any public school students housed in non-publicly-owned quarters or makeshift or improvised facilities as well as those who are in excess of the normal capacity in permanent publicly-owned school plants. (I-V, VI, VR)

**EXECUTIVE ADMINISTRATION SERVICES**--Activities associated with the overall general administrative or executive responsibility for the entire local education agency. (IIR, IVR)

**EXECUTIVE OFFICER**--A staff member assigned to manage and direct an administrative program of the school system, and who has been delegated administrative authority to direct the work of other staff members in the administrative program. (IV)

**EXEMPTED CHILD**--A child of compulsory school attendance age who is not required to attend school for any reason other than there being no program that meets his special educational need. (V-VR) *See also* **NONSERVED CHILD**.

**EXEMPTION FROM SCHOOL ACTIVITIES**--*See* **RESTRICTION ON SCHOOL ACTIVITIES**.

**EXPENDITURE CHARACTER**--The period of time which the expenditure is presumed to benefit. Character classification of expenditures are current expenditures, capital outlay, and debt service. (IIR, IVR)

**EXPENDITURES**--Charges incurred, whether paid or unpaid, which are presumed to benefit the current fiscal year. (I-II, III-III, VII, IIR)

**EXPLORATORY BUSINESS** (subject matter)--*See* appendix, p. 157.



**EXPULSION**—The action, taken by school authorities, compelling a student to withdraw from school for reasons such as extreme misbehavior, incorrigibility, or unsatisfactory achievement or progress in school work. (V-VR) *See also* **SUSPENSION**.

**EXTENDED-DAY SESSIONS**—A school day with separate times for different groups of pupils to start and end their sessions in the same school plant, e.g., high school juniors and seniors begin their session at 7:30 a.m. and the freshmen and sophomores begin their session at 8.30 a.m., the session for juniors and seniors ending one hour prior to the time the session ends for the freshmen and sophomores. (V, VI, IVR)

**EXTENDED SCHOOL DAY**—The part of the calendar day, following the daily session, when school-related activities and recreation are provided pupils by the school. (VI, IVR)

**EXTENDED SECONDARY SCHOOL**—*See* **COMMUNITY COLLEGE**.

**EXTENSION AGENT**—An individual who represents a college, university, or government agency and demonstrates operational techniques, teaches groups about valuable information, or trains individuals or groups in new skills. Historically, extension agents became best known through their use by the U.S. Department of Agriculture. (Unpublished IX)

**EXTENSION WORK**—Generally, instructional activities other than those connected with the instruction of pupils on the campus. Extension work includes correspondence study, classes for part-time pupils off the campus or at unusual hours on the campus, and similar instructional arrangements. (VI, IVR)

**EXTERNAL EVALUATION**—An evaluation conducted by individuals who are not directly involved in the process, procedure, or program being evaluated. (Unpublished IX)

**EXTERNAL SERVICES (State education agency)**—Services provided to any agency, institution, organization, or individual outside the State education agency. (VII)

**EXTRACLASS ACTIVITIES**—A term used synonymously with the term "cocurricular activities." (VR) *See also* **COCURRICULAR ACTIVITIES**.

**FABRIC MAINTENANCE SERVICES (subject matter)**—*See* appendix, p. 259.

**FACE VALUE**—As applied to securities, the amount of the liability stated in the security document. (II, IIR)

**FACILITIES ACQUISITION AND CONSTRUCTION SERVICES**—Activities concerned with acquisition of land and buildings, remodeling and construction of buildings and additions to buildings; initial installation or extension of service systems and other built-in equipment, and improvements to sites. (IIR, IVR)

**FACILITY**—A piece of land, a building site, a building, or part of a building. (III, IV, IVR)

**FACT**—An event, feat, or a piece of information presented as having objective reality. (IIR, IVR)

**FAMILY**—Two or more persons living in the same household who are related by blood, marriage, or adoption. (Unpublished VIII)

**FAMILY INCOME**—The combined incomes of all members of each family. (Unpublished VIII)

**FEDERAL AID FOR EDUCATION**—Any grant made by the Federal Government for the support of education. (II, IIR, IVR) *See also* **PUBLIC GRANT**.

**FEDERAL HIGHWAYS**—All roads whose construction cost is largely (90% for interstate routes and 50% plus for all other Federal roads) assumed by the Federal Government. Such roads are maintained by the State (Unpublished VIII)

**FEDERAL REVENUE**—Revenue provided by the Federal Government. Expenditures made with this revenue should be identifiable as federally supported expenditures. (IIR, IVR)

**FEE**—A payment, charge, or compensation for services (other than instruction), for privileges, or for the use of equipment, books, or other goods. (VI, VII, VR)

**FIDELITY BOND**—A bond guaranteeing the LEA against losses resulting from the actions of the treasurer, employees, or other persons of the system. (II-IIB-IIR, IVR) *See also* **SURETY BOND**.

**FIDELITY BOND PREMIUMS**—Expenditures for any bonds guaranteeing the LEA against losses resulting from the actions of the treasurer, employees, or other persons of the system. Also recorded here are any expenditures (not judgments) made in lieu of fidelity bonds. (IIR)

**FIELD BUILDING**—A building used primarily for housing dressing room, shower, and toilet facilities. It may contain additional facilities, such as sleeping quarters for visiting teams. (III)

**FIELD SIZE**—In data processing, the units of space allowed in a disk, drum, tape, tabulating card, or other device used to record data for a particular item of information. (VR)

**FILING (subject matter)**—See appendix, p. 157.

**FILING, OFFICE MACHINES, AND GENERAL OFFICE CLERICAL OCCUPATIONS (subject matter)**—See appendix, p. 233.

**FILING AND RECORD CONTROL (subject matter)**—See appendix, p. 157.

**FINAL MARK**—A mark, given to a pupil upon the completion of study in a course or subject-matter area of a self-contained class, which represents an evaluation of the work done for the entire course or area and is entered upon the permanent records of the pupil. (V-Vi) See also MARK.

**FINANCE AND CREDIT (subject matter)**—See appendix, p. 164.

**FINANCIAL ACCOUNTING**—The recording and reporting of activities and events affecting the money of an administrative unit and its program. Specifically, it is concerned (1) with determining what accounting records are to be maintained, how they will be maintained, and the procedures, methods, and forms to be used, (2) with recording, classifying, and summarizing activities or events, (3) with analyzing and interpreting recorded data, and (4) with preparing and initialing reports and statements which reflect conditions as of a given date, the results of operations for a specific period, and the evaluation of status and results of operation in terms of established objectives. (VII, IIR, IVR)

**FINANCIAL ACCOUNTING SERVICES**—Activities

concerned with maintaining records of the financial operations and transactions of the LEA, including such activities as accounting and interpreting financial transactions and account records. (IV-IIR, IVR)

**FIRE-RESISTIVE BUILDING**—A building constructed entirely of fire-resistive materials; or a building with fire-resistive walls and partitions, floors, stairways, and ceilings. A building of this type may have wood finish, wood or composition floor surfaces, and wood roof construction over a fire-resistive ceiling. (III)

**FIRST FLOOR**—A floor, beginning at the bottom of the building, that is at or above grade level along at least one entire side and has clear standing head room of at least 6 feet 6 inches. "At or above grade level" means that if the horizontal plane of the floor were to be extended on the side in question, no land within 20 feet of the building would be above this plane. (III) See also BASEMENT.

**FIRST-PROFESSIONAL DEGREE**—A degree that signifies completion of the academic requirements for beginning practice in a given profession, and is based on a program requiring at least 2 years of college work prior to entrance and a total of at least 6 academic years of college work to complete the degree program, including both prior-required college work and the professional program itself. First-professional degrees are awarded in fields such as dentistry (D.D.S. or D.M.D.), medicine (M.D.), optometry (O.D.), osteopathic medicine (D.O.), podiatry (Pod.D. or D.P.) or podiatric medicine (D.P.M.), veterinary medicine (D.V.M.), general law (LL.B. or J.D.), and general theological professions (B.D., M.Div., Rabbi, or other first-professional degree). (VR)

**FIRST-YEAR COLLEGE MATHEMATICS FOR ELEMENTARY SCHOOL TEACHERS (subject matter)**—See appendix, p. 213.

**FISCAL PERIOD**—Any period at the end of which an agency determines its financial condition and the results of its operations and closes its books. It is usually a year, though not necessarily a calendar year. The most common fiscal period is from July 1 through June 30. (II, III-IIB-VII, IIR, IVR)

**FISCAL SERVICES**—Activities involved with managing and conducting the fiscal operations of the LEA. This Service Area includes budgeting, receiving and disbursing, financial accounting, payroll, internal auditing, and purchasing. (IIR, IVR)

**FISCAL YEAR**—Any 12-month period at the end of which a school district determines its financial condition and the results of its operations and closes its books. The most common fiscal year begins on July 1 and ends the following June 30. (IIB)

**FIVE-OR 6-YEAR HIGH SCHOOL**—A secondary school served by one faculty organized under one principal which includes more than four grades, is not divided on a junior and senior basis, and is not preceded by a junior high school in the same school system. (VI, VR) (In earlier handbooks, this was called "Undivided High School.")

**FIXED ASSETS**—Land, buildings, machinery, furniture, and other equipment which the LEA intends to hold or continue in use over a long period of time. "Fixed" denotes probability or intent to continue use or possession, and does not indicate immobility of an asset. (II, III, IV, IIB, IIR, IVR)

**FIXED ASSETS GROUP OF ACCOUNTS**—A self-balancing group of accounts used to account for fixed assets owned by the LEA. Fixed assets purchased under Lease-Purchase agreements are entered in this group after the last payment is made. (IIR)

**FIXED CHARGES**—Charges of a generally recurrent nature which are not readily allocated to other expenditure categories. They consist of such charges as: school board contributions to employee retirement, insurance and judgments, rental of land and buildings, and interest on current loans. They do not include payments to public schoolhousing authorities or similar agencies. (I-II, IIR)

**FIXTURES**—*See* BUILT-IN EQUIPMENT.

**FLEXIBLE SCHEDULING**—An organization for instruction allowing for varying class sizes within and among courses, and providing for instructional groups which meet at varying frequencies and for varying lengths of time. (VI)

**FLOATING DEBT**—Liabilities (except bonds) payable on demand or at an early date, for example, accounts payable, bank loans, notes, or warrants. (II, IIR) *See also* CURRENT LIABILITIES.

**FLOOR AREA**—*See* GROSS FLOOR AREA.

**FLORISTRY** (subject matter)—*See* appendix, p. 164.

**FLOW-THROUGH BUDGET**—A plan of financial operation for the handling of those funds which constitute neither a receipt nor an expenditure of the State department or agency. Rather, such funds are distributed by the State department as an intermediary. Federal and State support funds are the most common examples of flow-through money. (VII)

**FOLLOWUP STUDY**—A study made of the experiences or status of former pupils, either for the purpose of assisting them in further adjustment or for securing information to help improve instruction or guidance for those still in school. In vocational education, this term refers to a research activity designed to determine what occupations are pursued by graduates and/or other former pupils in occupational programs, and how effective was their preparation in relationship to job requirements. (VI)

**FOOD DELIVERY**—Delivering prepared food, ready for serving, within the LEA. (IIR, IVR)

**FOOD DISTRIBUTION** (subject matter)—*See* appendix, p. 164.

**FOOD PREPARATION AND DISPENSING SERVICES**—Preparing and serving regular and incidental meals, lunches, or snacks in connection with school activities. It includes cooking, operating kitchen equipment, preparing salads, serving food, cleaning dishes, and storing dishes and kitchen equipment. (IV-IIR, IVR)

**FOOD SERVICE ASSIGNMENT**—An assignment to perform the activities of preparing and serving food. (IIR, IVR)

**FOOD SERVICE FUND**—Used to record financial transactions related to food service operations. (IIR, IVR)

**FOOD SERVICES**—Activities involved with the food services program of the school or LEA. This service area includes the preparation and serving of regular and incidental meals, lunches, or snacks in connection with school activities, and the delivery of food. (II, III-IV, VI-IIR, IVR)

**FOOD SERVICES** (subject matter)—*See* appendix, p. 164.

**FOOD SERVICES BUILDING**—A building used pri-

marily for housing personnel and equipment engaged in the preparation, serving, or distribution of regular and incidental meals, lunches, or snacks in connection with school activities. (III)

**FOOD SERVICES WORKER**—A staff member performing assigned activities concerned with preparing and serving meals (IV) *See also* **FOOD SERVICE ASSIGNMENT**.

**FOREIGN LANGUAGES** (subject matter)—*See* appendix, p. 181.

**FOREMAN**—A staff member performing the assigned activities of overseeing the work of laborers and crafts or trades workers. (IV)

**FOREMAN ASSIGNMENT**—An assignment, considered to be a function of management, to supervise the day-to-day operations of a group of skilled, semiskilled, or unskilled workers (e.g., the warehouse or garage workers). (IIR, IVR)

**FOREMANSHIP, SUPERVISION, AND MANAGEMENT** (subject matter)—*See* appendix, p. 259.

**FORESTRY (PRODUCTION, PROCESSING, MANAGEMENT, MARKETING, AND SERVICES)** (subject matter)—*See* appendix, p. 146.

**FORMAL ORGANIZATION**—A social group whose structure and activities have been rationally organized and standardized with definitely prescribed group rules, goals, and leaders. (Unpublished VIII)

**FORMER MIGRATORY CHILD**—As defined for Federal compensatory education programs, a child who, with the concurrence of his parents, is deemed to be a migratory child on the basis that he has been an interstate or intrastate migratory child but has ceased to migrate within the last five years and currently resides in an area where interstate and/or intrastate migratory children will be served. (VR) *See also* **INTERSTATE MIGRATORY CHILD** and **INTRASTATE MIGRATORY CHILD**.

**FORUM**—A public meeting at which topics are discussed by leaders and the audience. (V, VI)

**FOSTER HOME**—A family home, other than the home of a natural parent, into which a child is placed for rearing without adoption. (V, VR)

**FOUNDATION PROGRAM**—A system whereby State funds are used to supplement local or intermediate district funds in the support of education at the elementary and secondary levels. Such a program usually guarantees a "minimum foundation" of financial support from State funds regardless of the financial ability of the local or intermediate district to support education. The extent to which a foundation program equalizes the educational opportunity of pupils varies among the several States. (VII)

**FOUR-YEAR HIGH SCHOOL**—A 4-year secondary school immediately following the elementary school (as in an 8-4 plan) or a middle school. This includes 4-year vocational and technical high schools. (IV, V-VI, VR)

**FREE BONDING CAPACITY**—At any given time, the total amount of bonds in excess of existing obligations that a school district could issue under any circumstances if it were to reach its debt limit. (III) *See also* **BONDED DEBT** and **DEBT LIMIT**.

**FREEWAYS AND EXPRESSWAYS**—The first rank in the classification of streets, used exclusively for the movements of vehicles, and providing for no vehicular or pedestrian access to adjoining properties. Interchange of traffic between a freeway and other streets is accomplished by grade-separated interchanges. (Unpublished VIII)

**FREQUENCY DISTRIBUTION**—A distribution of the frequencies with which a set of mutually exclusive categories of characteristics appear in a population. (Unpublished VIII)

**FRESHMAN**—In college, a student who has earned less than the required number of credit hours for completion of the first year of study. The term also is used frequently in referring to a high school student in grade 9. (VR)

**FULL DAY OF ATTENDANCE**—Attendance during a complete full-day school session or approved curtailed session. Attendance at a State-approved half-day session for kindergarten or prekindergarten also should be counted as a full day of attendance. An excused absence should not be counted as a day of attendance. (V-VR) *See also* **SESSION** and **HALF DAY OF ATTENDANCE**.

**FULL-DAY SESSION**—A school session which con-

tains at least the minimum number of hours recommended by the State education agency for a full day of attendance in a given elementary or secondary grade other than kindergarten or prekindergarten. (V-VI, VR)

**FULL-TIME ASSIGNMENT**—The responsibility for a group of activities which requires full time of a staff member to perform. (IV-IVR)

**FULL-TIME EQUIVALENCY**—The amount of time for a less than full-time activity divided by the amount of time normally required in a corresponding full-time activity. Full-time equivalency usually is expressed as a decimal fraction to the nearest 10th. (I, II-VI-IIR, IVR)

**FULL-TIME EQUIVALENCY OF ASSIGNMENT**—The amount of employed time normally required of a staff member to perform a less than full-time assignment divided by the amount of time normally required in performing a corresponding full-time assignment. Full-time equivalency of assignment usually is expressed as a decimal fraction to the nearest 10th. (IV-V, VR)

**FULL-TIME EQUIVALENT ENROLLMENT**—The equivalent number of full-time students in a college at an established census date, determined by dividing the assumed normal individual student load of credit hours into the total student credit hours as of that date. (VR)

**FULL-TIME PERSONNEL**—School employees whose positions require them to be on the job on school days throughout the school year, at least the number of hours the schools in the LEA are in session. (I, II-IIR, IVR)

**FULL-TIME STAFF MEMBER**—A staff member whose total current assignments, regardless of their classification, require his services each working day at least a number of hours equal to the number of hours of a regular working day. (IV-VII, IVR)

**FULL-TIME STUDENT**—A student who is carrying a full course load, as determined by the State, local school system, or institution. A college student is generally considered to be full-time when he carries at least 75 percent of a normal student load. (V, VI-VR)

**FULL-TUITION STUDENT**—A student usually a non-resident of the geographic area served by a specified

school, school system, or institution for whom the maximum allowable tuition is paid. (V-VR)

**FUNCTION (local education agency)**—An action which contributes to a larger action of a person, living thing, or created thing. (IIB-IIR, IVR)

**FUNCTION (State education agency)**—One of a major group of related actions which contributes to a larger action. In a State education agency, the major groups of related actions (functions) as delineated in this handbook are as follows. (1) General Management, (2) Planning, Research, Development, and Evaluation, (3) Consultative Services, (4) Distribution of Resources, (5) Internal Services, and (6) Operation or Approval of Programs and Schools. The larger action, or central purpose, is education. (VII) See also MAJOR FUNCTION.

**FUNCTIONAL AREA**—That geographic area considered as an integrated functional unit for economic study purposes. Basic/nonbasic determinations require establishing functional boundaries for the measurement of the flow of goods and services. Boundaries may or may not be coincident with a political community. (Unpublished VIII)

**FUNCTIONALLY ILLITERATE**—An adult who is unable to read, write, and compute sufficiently well to meet the requirements of adult life. For purposes of many adult/continuing education programs, this is considered to include adults who have not gone beyond the eighth grade or who cannot read, write, and compute at or above an eighth grade level of performance. In the United States this term usually is applied also to foreign-born adults having limited ability to use the English language. (VI-VR)

**FUND**—An independent accounting entity with its own assets, liabilities, and fund balances. Generally, funds are established to account for financing of specific activities of an agency's operations (II-IIB-VII, IIR, IVR)

**FUND ACCOUNTS**—All accounts necessary to set forth the financial operations and financial condition of a fund. (II, IIR)

**FUND BALANCE**—The excess of the assets of a fund over its liabilities and reserves except in the case of funds subject to budgetary accounting where, prior to the end of a fiscal period, it represents the excess of

the fund's assets and estimated revenues for the period over its liabilities, reserves, and appropriations for the period. (IIB-IIR)

**FUND, CAPITAL PROJECT**—See CAPITAL PROJECT FUND.

**FUND, CASH CHANGE**—See CASH EXCHANGE FUND.

**FUND, CONSTRUCTION**—See CONSTRUCTION FUND.

**FUND, CONTINGENT**—See CONTINGENT FUND.

**FUND, DEBT**—See DEBT FUND.

**FUND, DEBT SERVICE**—See DEBT SERVICE FUND.

**FUND, ENDOWMENT**—See ENDOWMENT FUND.

**FUND, FOOD SERVICE**—See FOOD SERVICE FUND.

**FUND, GENERAL**—See GENERAL FUND.

**FUND, PERMANENT SCHOOL**—See PERMANENT SCHOOL FUND.

**FUND, PUPIL ACTIVITY**—See PUPIL ACTIVITY FUND.

**FUND, SINKING**—See SINKING FUND.

**FUND, SOURCE OF**—See SOURCE OF FUND.

**FUND, SPECIAL**—See SPECIAL FUND.

**FUND, SPECIAL REVENUE**—See SPECIAL REVENUE FUND.

**FUNDED DEBT**—Same as Bonded Debt which is the preferred term. (II, IIR)

**FUNDING**—The conversion of judgments and other floating debt into bonded debt. (II, IIR)

**FURNITURE**—Movable equipment that is used for sitting; as a support for writing, drawing, experimentation, and work activities; as storage space for material items; or for decorative purposes. Examples are desks, chairs, tables, floor lamps, room-size rugs, file cabinets,

bookcases, work benches, wheeled science demonstration tables, and storage cabinets. (III)

## G

**GAIN OR LOSS ON SALE OF INVESTMENTS**—Gains or losses realized from the sale of bonds or stocks; gains represent the excess of the sales proceeds over cost or other basis at date of sale (cost less amortization of premium in the case of long-term bonds purchased at a premium over par value or cost plus amortization of discount on long-term bonds purchased at a discount under par value); gains realized from sale of U.S. Treasury bills represent interest income. Losses represent the excess of the cost or other basis at date of sale (as described above) over the sales proceeds. (IIR)

**GAINFUL EMPLOYMENT**—Employment in a recognized occupation for which persons normally receive a wage, salary, fee, or profit. (VI)

**GARDENER**—A staff member performing the assigned activities which have to do with the care and nurture of growing plants on the grounds of the school plant. (IV)

**GENERAL ADMINISTRATION** (local education agency)—Those activities involved in the overall general administrative responsibility for the entire LEA. (IIR, IIV)

**GENERAL ADMINISTRATION RESPONSIBILITY**—The area of systemwide general administrative responsibility which is not confined to or cannot be classified in a specific and narrower area of administrative responsibility. It consists of administrative activities which can be performed only by the chief executive officer and by his general administrative executive assistants to whom this general administrative responsibility is delegated by the governing authority. (IV)

**GENERAL AID**—Educational support funds provided from a higher governmental level which are not limited to any specific program or purpose but which may be used in financing the general educational program as seen fit by the recipient governing authority. (VII)

**GENERAL BUSINESS OR INTRODUCTION TO BUSINESS** (subject matter)—See appendix, p. 158.

**GENERAL CONTINUATION CLASS**—Part-time

class—for persons under 18 years of age who have left full-time instruction to enter the labor force—providing instruction designed primarily to increase civic intelligence rather than to develop specific occupational competence. (VI)

**GENERAL EDUCATION PROGRAM**—A secondary school, junior college, or adult education program of studies designed primarily to prepare students for the common activities of persons as citizens, family members, and workers, and which is contrasted with specialized education which prepares for an occupation or career. (V-VI-VR)

**GENERAL FUND** (local education agency)—Used to account for all transactions which do not have to be accounted for in another fund. Used to account for all ordinary operations of an LEA. (II-IIB-IIR, IVR)

**GENERAL INDUSTRIAL ARTS** (Formerly General Shop) (subject matter)—See appendix, p. 202.

**GENERAL LEDGER** (local education agency)—A book, file or other device in which accounts are kept to the degree of detail necessary, that summarizes the financial transactions of the LEA. General ledger accounts may be kept for any group of items of receipts or expenditures on which an administrative officer wishes to maintain a close check. (II-IIB-VII-IIR, IVR)

**GENERAL LONG-TERM DEBT GROUP OF ACCOUNTS**—A self-balancing group of accounts used to account for general long-term debt of a governmental unit. (IIR)

**GENERAL MAINTENANCE ASSIGNMENT**—An assignment to perform activities concerned with repair and upkeep of buildings, machinery, and electrical and mechanical equipment. (IIR, IVR)

**GENERAL MATHEMATICS** (subject matter)—See appendix, p. 213.

**GENERAL MERCHANDISE** (subject matter)—See appendix, p. 164.

**GENERAL PROPERTY LEDGER**—A book, file, or other device in which accounts are kept to the degree of detail necessary, summarizing property information. General ledger accounts may be kept for any group of property items on which an administrative officer wishes to maintain a close check. (III)

**GENERAL SCIENCE (INCLUDING ELEMENTARY SCHOOL SCIENCE)**, (subject matter)—See appendix, p. 224.

**GENERAL USE ROOM**—A term limited to auditoriums, gymnasiums, cafeterias, libraries, and multipurpose rooms according to the major use of the facility. (I)

**GEOGRAPHY** (subject matter)—See appendix, p. 240.

**GEOMETRY** (subject matter)—See appendix, p. 217.

**GIFT**—Money received from a philanthropic foundation, private individual, or private organization for which no repayment or special service to the contributor is expected. (II-III-IIR)

**GOVERNING AUTHORITY**—A government official, board, or commission, legally authorized by the constitution or by legislation to assume jurisdiction and responsibility in a specific field of government. (VII)

**GOVERNING BOARD**—See PUBLIC BOARD OF EDUCATION.

**GOVERNMENTAL AGENCIES**—Any subdivisions of any governmental level—local, State, or Federal. (VII)

**GRADE**—That portion of a school program which represents the work of one regular school term, identified by a designation such as kindergarten, grade 1, or grade 10. (I-IV, V, VI, VII, VR)

**GRADE DISTRIBUTION**—The total number of original entries in the State (E1+E2) for each grade of a number of specified grades at the end of the school year. (I)

**GRADE LEVEL**—A designation applied to that portion of the curriculum which represents the work of one regular school term. (VR)

**GRADE-POINT AVERAGE**—A term used synonymously with the term "mark-point average." (VR) See MARK-POINT AVERAGE.

**GRADE POINTS**—A term used synonymously with the term "mark points." (VR) See MARK POINTS.

**GRADED SCHOOL**—A school composed of separate standard grades or combinations of grades which serve as the basis for assigning pupils to classes. (VI)

**GRADUATE**—An individual who has received formal recognition for the successful completion of a prescribed program of studies. (IV, V, VR)

**GRADUATE STUDY**—College level courses of study beyond undergraduate study which may lead to such graduate degrees as the master's degree and doctor's degree. (IV, VII)

**GRADUATION**—Formal recognition given to a pupil for the successful completion of a prescribed program of studies. (V)

**GRANTS-IN-AID**—Contributions made by a governmental unit to an LEA which are not related to specific revenue sources of the respective governmental unit, i.e., general, or if related to specific revenue sources of the governmental unit, are distributed on some flat grant or equalization basis. Grants-in-aid are made by intermediate governments, State governments, and the Federal Government. (IIR, IVR)

**GRAPHIC ARTS**—The planning and execution of art layouts by use of sketches, pictures, or diagrams to illustrate educational programs or processes for publication, demonstration, and more effective communication. (VII)

**GRAPHIC ARTS (subject matter)**—See appendix, p. 202.

**GRAPHIC ARTS ASSIGNMENT**—An assignment to plan and arrange art layouts to illustrate programs or processes for publication, demonstration, and more effective communication. (IIR, IVR)

**GRAPHIC ARTS OCCUPATIONS (subject matter)**—See appendix, p. 259.

**GROSS EARNINGS**—See **GROSS INCOME**.

**GROSS FLOOR AREA**—The sum of the areas at each floor level included within the principal outside faces of exterior walls, neglecting architectural setbacks or projections. This includes all stories or areas which have floor surfaces with clear standing head room (6'6" minimum) regardless of their use. (II, III, IIR)  
See also **AREA OF A BUILDING**.

**GROSS INCOME**—Revenues before deducting any expenses an expression employed in accounting for individuals, financial institutions, and the like. Also,

gross revenue, or, incidental revenue of a manufacturing or trading enterprise. (IIR) See **INCOME**.

**GROSS RENTAL OF HOUSING**—The contract rent, the monthly dollar rent agreed upon, plus the average cost of utilities (water, electricity, gas) and other fuels, to the extent that these are paid for by the renter. (Unpublished VIII)

**GROUNDS**—Land and all improvements to it (other than buildings) which are owned, rented, or leased and used by the school system. (IV)

**GROUNDSKEEPING ASSIGNMENT (local education agency)**—An assignment to maintain grounds owned, rented, or leased, and used by the LEA. This assignment does not include the operation of machinery requiring semiskilled training or experience. (IIR, IVR)

**GROUP ASSIGNMENT CLASSIFICATION**—A classification of the assigned activities of a staff member according to whether the activities constitute a professional educational assignment; a professional or technical assignment, other than educational; or other assignment. (IV)

**GROUP CONTROL**—A method of property control whereby equipment items that are the same with respect to function, material, shape, and size are accounted for as a group rather than as single units. That is, the individual piece of equipment loses its identity as such and is one of a group. (III)

**GUARD**—A staff member performing assigned activities concerned with the safety and security of school property, facilities, and personnel. (IV)

**GUARD/WATCHMAN ASSIGNMENT (local education agency)**—An assignment to perform activities concerned with maintaining the safety and security of LEA property, facilities, and personnel. (IIR, IVR)

**GUEST STUDENT**—In community/junior colleges, a status which may be granted a part-time student attending another college or university on a full-time basis. (VR)

**GUIDANCE AREA**—A room or rooms designed, or adapted, for the use of persons, such as counselors, deans, placement counselors, and clerical personnel, who have been assigned specific duties and school time to carry on recognized functions of the guidance program. (III)



**GUIDANCE PERSONNEL**—Persons who have been assigned specific duties and school time to carry on recognized functions of the guidance programs in whole or in part. Classify here: counselors, deans, placement counselors, guidance specialists, and similar personnel. This refers to both certificated and noncertificated personnel. (I, II, III-IV-IIR, IVR)

**GUIDANCE SERVICES**—The activities of counseling with students and parents, providing consultation with other staff members on learning problems, evaluating the abilities of students, assisting students to make their own educational and career plans and choices, assisting students in personal and social development, providing referral assistance, and working with other staff members in planning and conducting guidance programs for students. (IV-V-VI-IVR-VR)

**GYMNASIUM**—An indoor instructional space designed, or adapted, specifically for most physical education activities. (III-VI) *See also* INSTRUCTION AREA.

**GYMNATORIUM**—An instructional space designed, or adapted, specifically for the combined functions that might normally be served by a separate gymnasium and a separate auditorium. (III-VI) *See also* AUDITORIUM; GYMNASIUM; and INSTRUCTION AREA.

## H

**HALF DAY OF ATTENDANCE**—Attendance for approximately half of a full-day school session or an approved curtailed session. For example, a student who is present a major part of either the morning or afternoon portion of a school session usually is counted as being in attendance for that half session. This usually is the smallest unit of time reported for attendance purposes by an elementary or secondary school during the regular school term of elementary and secondary schools. (V-VR) *See also* SESSION and FULL DAY OF ATTENDANCE.

**HALF-DAY SESSION**—A school session which contains the minimum number of hours recommended by many State education agencies for kindergarten or prekindergarten instruction, when the length of this session approximates half the number of hours recommended for a full-day session in other elementary grades. Kindergarten and prekindergarten students attending a half-day session are in membership for the

full day. However, for purposes of obtaining statistical comparability *only*, ratios involving these students are computed as though they were in membership for a half day. (V-VI-VR)

**HAND TOOLS**—Instruments, machinery, and apparatus that may be picked up in the hands and which are moved as individual units during the performance of their primary functions. Examples of equipment designated by this title in this handbook are electric powered hand saws, drills, and sanders, electric flatirons, and expensive sets of hand instruments, such as tap and die sets, wrench sets, and micrometer sets. (III)

**HANDICAP**—An atypical physical, health, sensory, mental, or psychological condition that adversely affects the performance of an individual. (V, V'-VR)

**HANDICAPPED CHILDREN**—As defined for Federal programs of education for the handicapped, mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, crippled, or other health impaired children who by reason thereof require special education and related services. The term also includes children with specific learning disabilities to the extent that such children are health impaired children who by reason thereof require special education and related services. (This definition is taken from the Rules and Regulations for the Education of the Handicapped Act—P.L. 91-230, Title VI—and from the Regulations for Title I of the Elementary and Secondary Education Act of 1965, as amended.) (VR)

**HARD OF HEARING**—Individuals with slightly to markedly defective hearing, as determined by their ability to use residual hearing in daily life, sometimes with the use of a hearing aid. (VR)

**HARDWARE, BUILDING MATERIALS, FARM AND GARDEN SUPPLIES AND EQUIPMENT** (subject matter)—*See* appendix, p. 164.

**HEAD OF HOUSEHOLD**—The individual assuming the responsibility for a family group. (V, VR)

**HEAD START PROGRAM**—A child development program which offers economically disadvantaged preschool children learning experiences, health screening (including examination of physical condition, dental health, mental health, and nutrition), and treatment where required. Full-year programs are provided for

children as young as three years old. In some instances, summer enrichment programs are offered for children who will enter school for the first time the following fall. (VR)

**HEALTH** (subject matter) - See appendix, p. 190.

**HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION** (subject matter) - See appendix, p. 189.

**HEALTH OCCUPATIONS** (subject matter) See appendix, p. 183.

**HEALTH PERSONNEL**-Persons in the field of physical and mental health, such as physicians, psychiatrists, school nurses, dentists, dental hygienists, psychiatric social workers, and therapists, whose services are directed primarily at individuals, although sometimes used for group activities. (I, II, III-IV-IVR)

**HEALTH-RELATED TECHNOLOGY** (subject matter) - See appendix, p. 250.

**HEALTH SERVICE AREA**-A room or rooms designed, or adapted, for the use of persons in the field of physical and mental health, such as physicians, psychiatrists, nurses, dentists, dental hygienists, psychiatric social workers, and therapists, in providing health services to the student body in the nature of inspection, treatment, weighing, etc. (III)

**HEALTH SERVICES** (staff)-Activities concerned with medical, dental, and nurse services provided for local education agency employees. Included are physical examinations, referrals, and emergency care. (IV-IIIR, IVR)

**HEALTH SERVICES** (student)-Physical and mental health services which are not direct instruction. Included are activities involved with providing pupils with appropriate medical, dental, and nurse services. (IV-IIIR, IVR)

**HEALTH TEST**-Laboratory or other test (e.g., Schick Test, chest x-ray, and electrocardiogram) which indicates the condition of a patient's health. (IV)

**HEARING HANDICAPPED**-Individuals with markedly impaired hearing. (VR) See also **HARD OF HEARING** and **DEAF**.

**HEAVY CONSTRUCTION MACHINERY**-Self-propelled and attachment type machinery or apparatus that is used in heavy construction work, such as excavating; constructing buildings, roads, and sidewalks; and demolishing buildings. Examples of equipment designated by this term are: cranes, compressors, self-propelled rollers, bulldozers, graders, scrapers, power shovels, caterpillars, pile drivers, and concrete mixers. Major attachments that can be operated interchangeably with two or more pieces of heavy construction machinery are accounted for separately. Vehicles, such as dump trucks, concrete mixer trucks, and water sprinkling trucks, which may be used in connection with heavy construction work are not designated by this term. (III) See also **VEHICLE**.

**HELPER**-A staff member performing a variety of assigned activities often under the direction of a skilled worker. A helper may thus learn a trade or acquire the competencies necessary to perform assignments requiring skill but, unlike an apprentice, does not work under an agreement with his employer that such is the purpose of his assignment. (IV)

**HELPING TEACHER**-A staff member performing assigned professional activities which are directed primarily to assisting the teacher in the classroom to improve teaching techniques. (The term helping teacher is not used to denote a teacher aide.) (IV)

**HELPING-TEACHER SERVICES**-An activity of one or more professional staff members directed primarily toward assisting various teachers in their classrooms to improve their teaching techniques. (IV-VI)

**HIGH SCHOOL COMPLETION**-(1) Satisfactory completion of a recognized secondary school curriculum (usually four years) leading to a diploma; (2) any satisfactory combination of day and night center high school courses that fulfills the time/activity requirements set by the State for a four-year high school diploma. (Unpublished IX)

**HIGH SCHOOL DIPLOMA**-A formal document certifying the successful completion of a prescribed secondary school program of studies. In some States or communities, high school diplomas are differentiated by type such as an academic diploma, a general diploma, or a vocational diploma. (IV, V, VI-IVP-VR)

**HIGH SCHOOL EQUIVALENCY DIPLOMA**-See **CERTIFICATE OF HIGH SCHOOL EQUIVALENCY**.

**HIGH SCHOOL EQUIVALENCY EXAMINATION**—An examination, approved by a State department of education or other authorized agency, intended to provide an appraisal of the student's achievement or performance in the broad subject-matter areas usually required for high school graduation. The Tests of General Educational Development (GED) are the most widely recognized high school equivalency examination. (VI-VR) *See also* TESTS OF GENERAL EDUCATIONAL DEVELOPMENT (GED) and CERTIFICATE OF HIGH SCHOOL EQUIVALENCY.

**HIGH SCHOOL GRADUATE**—A person who has received formal recognition from the school authorities, as by the granting of a diploma, for completing a prescribed course of study, in a high school, terminating with grade 12. (Grade 11 in a few systems.) (I)

**HIGH SCHOOL POSTGRADUATE**—A student who, after graduating from high school (grade 12), enters a secondary school for additional schoolwork. (IV, V, VI, VR)

**HIGH SCHOOL PROGRAMS**—Learning experiences concerned with the knowledge, skills, appreciations, attitudes, and behavioral characteristics which are considered to be needed by all pupils in terms of understanding themselves and their relationships with society and various occupations and/or professions and which normally may be achieved during the high school years. (IIR, IVR)

**HIGHER EDUCATION**—Education above the instructional level of the secondary school, usually beginning with grade 13, which is provided by colleges, universities, graduate schools, professional schools, and other degree granting institutions. (VI-VII, IVR)

**HIGHEST GRADE COMPLETED**—The highest grade of school completed or the grade prior to the highest grade attended but not completed. (Unpublished VIII)

**HISTORY** (subject matter)—*See* appendix, p. 242.

**HOME ECONOMICS** (subject matter)—*See* appendix, p. 197.

**HOME ECONOMICS-RELATED TECHNOLOGY** (subject matter)—*See* appendix, p. 251.

**HOME ECONOMICS ROOM**—A special instructional space designed, or provided with special built-in equip-

ment, for learning activities involving the varied aspects of food, clothing, and shelter, with particular emphasis on consumer education, management of money, time, energy, and human resources, and human relationships, focused on child growth and development, family relationships, and family health. (III-VI) *See also* SPECIAL CLASSROOM.

**HOME FURNISHINGS** (subject matter)—*See* appendix, p. 164.

**HOME MECHANICS** (subject matter)—*See* appendix, p. 202.

**HOMEBOUND INSTRUCTION**—*See* INSTRUCTION FOR HOMEBOUND STUDENT.

**HOMEBOUND STUDENT**—A student who is unable to attend classes and for whom instruction is provided at home by a teacher. (V, VI, IVR, VR) *See also* INSTRUCTION FOR HOMEBOUND STUDENT.

**HOMEMAKING: PREPARATION FOR PERSONAL, HOME, AND FAMILY LIVING** (subject matter)—*See* appendix, p. 197.

**HOMEROOM**—The room or other space where a teacher meets with a group of students for their homeroom period. (VR) *See also* HOMEROOM PERIOD.

**HOMEROOM PERIOD**—A portion of a daily session, in a departmentalized or semidepartmentalized instructional organization, during which a teacher and a group of students meet primarily for purposes of checking attendance, making announcements, and attending to other-administrative details. (VI, VR)

**HOME-SCHOOL COUNSELORS**—*See* VISITING TEACHERS.

**HOMEWORK** School assignments in preparation for a given course or subject-matter area—to be completed within a specified time limit and during nonclass time. (VI)

**HONOR ROLL**—A list of names published each marking period, term, or year indicating students who have achieved a set standard of performance in their schoolwork. In colleges, this frequently is referred to as the "dean's list." (VR)

**HONOR SOCIETY** An association that receives into membership students who have achieved high scholarship and, frequently, who also fulfill established requirements for distinction in leadership or citizenship. (VR)

**HONORS PROGRAM**—A special accelerated educational program for advanced students. (VR)

**HOSPITAL CERTIFICATE**—A certificate issued by a hospital verifying the name and date of birth of a child. (V, VR)

**HOSPITAL FACILITY**—A building or site belonging to or used by a hospital, sanatorium, convalescent home, or mental health clinic. (V)

**HOSPITAL INSTRUCTION**—Formal instruction provided in a hospital, sanatorium, or convalescent home. (V, VI-VR)

**HOTEL AND LODGING** (subject matter)—See appendix, p. 164.

**HOUSEHOLD**—All persons occupying a single housing unit. (Unpublished VIII) See also HOUSING UNIT.

**HOUSING AUTHORITY OBLIGATIONS**—[An account used to record payments to a public school housing authority or to an agency with similar functions.] A public school housing authority is a public corporation or quasi-public corporation having power to perform one or more of the following functions. issue authority bonds for public school purposes; acquire and hold property for public school purposes; construct public school buildings; lease public school buildings to local public school administrative units, or transfer title to such units. (IIR)

**HOUSING UNIT**—A house, apartment, group of rooms, or single room, which is occupied, or vacant, but intended for occupancy as separate living quarters. Specifically, there is a housing unit when the occupants live and eat separately from any other persons in the structure and there is either (1) direct access to the unit from the outside or through a common hall, or (2) complete kitchen facilities for the occupants' exclusive use. (Unpublished VIII)

**HUMAN RIGHTS**—Just claims to the elimination of want, religious and racial discrimination, and to equal educational and employment opportunity. (VII, IVR) See also CIVIL RIGHTS.

**HUMANITIES**—May embrace literature, languages, history, music, art, and philosophy (or any combination of these)—planned to acquaint man with his origins and neighbors, including the thoughts, creations, and actions of his predecessors through the ages. The humanities are a record of what man over the centuries has felt, thought, and done in his search for answers to questions about human concerns such as personal identity, origins, meaning of life, and destiny. (VI)

**HUMANITIES** (subject matter—Art)—See appendix, p. 148.

**HUMANITIES** (subject matter—English Language Arts)—See appendix, p. 178.

**HUMANITIES** (subject matter—Foreign Languages)—See appendix, p. 183.

**HUMANITIES** (subject matter—Music)—See appendix, p. 224.

**HUMANITIES** (subject matter—Social Sciences/Social Studies)—See appendix, p. 243.

## I

**IDENTIFICATION NUMBER**—A number assigned to a staff member by an LEA or State agency for identification and record keeping purposes. These include such numbers as payroll number, employee number, health plan number, and retirement system number. (IV, IVR)

**IMMUNIZATION**—The development of immunity or protection against a disease by inoculation, vaccination, or other means. (V)

**IMPAIRED ARTICULATION**—Speech sound substitutions, omissions, and/or distortions involving the speech mechanism (e.g., tongue, lips, or velum) resulting in defective speech either in producing syllables or connected speech, (e.g., "wabbit" for "rabbit," and "sop" for "stop"). Impaired articulation is characterized by patterns of consistently occurring errors and should not be confused with occasional mispronunciations. (VR)

**IMPLEMENTATION**—The process of putting into effect something which has proved to be feasible and desirable. (VII)

**IMPREST SYSTEM**—A system for handling disbursements whereby a fixed amount of money is set aside for a particular purpose. Disbursements are made from time to time as needed. At certain intervals, a report is rendered of the amount disbursed, and the cash is replenished for the amount of the disbursements, ordinarily by check drawn on the fund or funds from which the items are payable. The total of cash plus unreplenished disbursements must always equal the fixed sum of cash set aside. (II-IIB-IIR)

**IMPROVEMENT OF INSTRUCTION SERVICES**—Activities which are designed primarily to assist instructional staff in planning, developing, and evaluating the process of providing challenging and rewarding learning experiences for pupils. These activities include curriculum development, techniques of instruction, child development and understanding, and staff training. (IIR, IVR)

**IMPROVEMENTS OTHER THAN BUILDINGS**—A fixed asset account which reflects the acquisition value of permanent improvements, other than buildings, which add value to land. Examples of such improvements are fences, retaining walls, sidewalks, pavements, gutters, tunnels, and bridges. If the improvements are purchased or constructed, this account contains the purchase or contract price. If improvements are obtained by gift, it reflects the appraised value at time of acquisition. (IIR)

**IMPROVEMENTS TO SITE**—Initial and additional work (other than buildings) performed upon a site and its adjacent ways after acquisition by the school district, involving such things as grading (other than excavation, fill, and backfill necessary for construction of a building), landscaping, seeding, and planting of shrubs and trees, constructing new sidewalk, roadways, retaining walls, sewers, and storm drains, installing water mains, field hydrants and field sprinkling systems, and outdoor drinking fountains, original surfacing and soil treatment of athletic fields and tennis courts; furnishing and installing for the first time playground apparatus built into the grounds, flagpoles, gateways, fences, and underground storage tanks which are not parts of building service systems, and demolition work. (III)

**INCIDENTAL LEARNING**—Learning occurring concomitantly with an activity or experience, but toward which the activity or experience is not specifically directed, for example, learning how to spell words

*Labrador and cyclone* while studying geography. (Unpublished IX)

**INCOME TAX**—Taxes levied on net income, that is, by gross income less certain deductions permitted by law. These taxes can be levied on individual, corporation or unincorporated businesses where the income is taxed distinctly from individual income. Separate accounts may be maintained for individual, corporation and unincorporated business income tax. (IIR)

**INCOMPLETE HIGH SCHOOL**—A secondary school which offers less than four full years of work beyond grade 8 in a school system that is organized in such a manner that grades PreK, K, or 1 through 8, constitute the elementary grades. These are sometimes called "truncated high schools." (I, II, III, IV, V-VI, VII, VR)

**INCORPORATED PLACE**—A place (concentration of population) legally constituted as a city, borough, town or village, except that towns are not recognized as an incorporated place in the New England states, New York, and Wisconsin. (Unpublished VIII)

**INDEPENDENT AMERICAN OVERSEAS SCHOOL**—An elementary or secondary school located outside the United States and its outlying areas which (a) follows basically a U.S.-type curriculum, (b) uses English as the primary language of instruction, and (c) has a large proportion of US citizens in its student body and staff. (VR)

**INDEPENDENT NONPROFIT SCHOOL**—A private or nonpublic school which is not a part of a school system and is operated with no intention of making a profit. (VR) *See also* PRIVATE OR NONPUBLIC SCHOOL.

**INDIAN EDUCATION**—Educational experiences provided for American Indian pupils. (VII)

**INDIRECT COSTS**—*See* OVERHEAD COSTS and INDIRECT EXPENSES.

**INDIRECT EXPENSES**—Those elements of cost necessary in the provision of a service which are of such nature that they cannot readily or accurately be identified with the specific service. For example, the custodial staff may clean corridors in a school building which is used jointly by administrative, instructional, maintenance, and attendance personnel. In this case, a part of custodial salaries is an indirect expense of each service using the corridors. However, it is impossible to

determine readily or accurately the amount of the salary to charge each of these services. (II-III IIR, IVR) *See also* DIRECT EXPENSES.

**INDIRECT SERVICES**—Services for programs which cannot be identified with a specific program. All support services programs are indirect services of instruction programs (IIR, IVR)

**INDIVIDUAL INSTRUCTION**—An arrangement whereby a student receives instruction by himself and not as part of a class, i.e., instruction for a single person. (V, VI-VR)

**INDUSTRIAL ARTS (subject matter)**—*See* appendix, p. 199.

**INDUSTRIAL ARTS MATHEMATICS (subject matter)**—*See* appendix, p. 202.

**INDUSTRIAL ARTS SCIENCE (APPLIED CHEMISTRY) (subject matter)**—*See* appendix, p. 202.

**INDUSTRIAL ARTS SCIENCE (APPLIED PHYSICS) (subject matter)**—*See* appendix, p. 203.

**INDUSTRIAL ATOMIC ENERGY OCCUPATIONS (subject matter)**—*See* appendix, p. 260.

**INDUSTRIAL MARKETING (subject matter)**—*See* appendix, p. 165.

**INDUSTRIAL MATERIALS AND PROCESSES (subject matter)**—*See* appendix, p. 203.

**INFORMATION COMMUNICATION OCCUPATIONS (subject matter)**—*See* appendix, p. 233.

**INFORMATION SERVICES (administrative)**—Activities concerned with the writing, editing, and other preparation necessary to disseminate educational and administrative information to pupils, staff, managers, or to the general public through direct mailing, the various news media, or personal contact. (IIR, IVR)

**INFORMATION SERVICES (pupils)**—Activities organized for the dissemination of educational, occupational, and personal/social information to help acquaint pupils with the curriculum and with educational and vocational opportunities and requirements. Such information might be provided directly to pupils through group or individual guidance, or indirectly through staff members or parents. (VI-IIR-IVR)

**INITIAL TEACHING ALPHABET (ITA)**—A decoding system using a 44-character alphabet (each character representing a distinct sound) instead of the standard 26-letter alphabet (in which the vowels and consonants represent varying sounds). (VI)

**INJURY CAUSING ACCIDENT**—An unforeseen or unexpected occurrence or event resulting in bodily injury. (IV)

**INNER CITY SCHOOL**—A school usually located in a high density population area of an urban, central city and normally attended by a high proportion of urban disadvantaged students; the attendance area of the school is often characterized by factors such as significant proportion of substandard dwellings, of low-income housing, of non-white racial or ethnic groups, of non-English speaking population, or of health and other social problems. (Unpublished)

**IN-SCHOOL INSTRUCTION**—Instruction received by a student within the school plant. (V, VI, VR)

**INSERVICE EDUCATION OR TRAINING (local education agency)**—A program of systematized activities promoted or directed by the education agency, or approved by the education agency, contributing to the professional or occupational growth in competence of staff members during the time of their service to the agency. College credit programs are not regarded in this hand book as inservice education or training. (IV-IVR)

**INSERVICE EDUCATION OR TRAINING (State education agency)**—A program of systematized activities promoted or directed by the State education agency, or approved by the State education agency, contributing to the professional or occupational growth in competence of board members and State staff members during the time of their service to the agency. College credit programs are not regarded as inservice education or training. (VII)

**INSERVICE EDUCATION SERVICES (for noninstructional staff)**—Activities developed by the LEA for training of noninstructional personnel in all classifications. (IIR, IVR)

**INSPECTOR ASSIGNMENT**—An assignment to appraise the condition of equipment and buildings as they relate to safety and health, and the condition of new construction as it relates to specifications and codes. (IV, IIR, IVR)

**INSTITUTION FOR DELINQUENT CHILDREN**—As defined for Federal compensatory education programs, a public or private nonprofit residential facility which is operated primarily for the care of, for an indefinite period of time or for a period of time other than one of short duration, children and/or youth who have been adjudicated to be delinquent. Such term also includes an adult correctional institution in which children are placed. (VR) *See also* **DELINQUENT BEHAVIOR** and **JUVENILE DELINQUENT**.

**INSTITUTION FOR NEGLECTED CHILDREN**—As defined for Federal compensatory education programs, a public or private nonprofit residential facility (other than a foster home) which is operated primarily for the care of, for an indefinite period of time, at least ten children and/or youth who have been committed to the institution, or voluntarily placed in the institution, and for whom the institution has assumed or been granted custodial responsibility pursuant to applicable State law, because of the abandonment or neglect by, or death of, parents or persons acting in the place of parents. (VR)

**INSTITUTIONAL**—Pertaining to an organization having a social, educational, or religious purpose, as a school, church, hospital, or reformatory. (VII, IVR)

**INSTRUCTION**—The activities dealing directly with the teaching of students and/or with improving the quality of teaching. (I, II, III, V, VI-IVR, IVR-VR)

**INSTRUCTION AND CURRICULUM DEVELOPMENT SERVICES**—Activities designed to aid teachers in developing the curriculum, preparing and utilizing special curriculum materials, and understanding and appreciating the various techniques which stimulate and motivate pupils. (IIR, IVR)

**INSTRUCTION AREA**—A room (or other area) which was specifically designed, or adapted, to accommodate some form of instructional activity and is available for such purposes. Regular classrooms; special classrooms, such as kindergarten rooms, laboratories, shops, home economics rooms, music rooms, and special classrooms for exceptional children, and other areas, such as libraries, study halls, audiovisual rooms, auditoriums, gymnasiums and multipurpose rooms, should be included as instruction areas. (III, V)

**INSTRUCTION BUILDING**—A building used primarily for housing personnel and equipment engaged in

activities dealing directly with the teaching of students or improving the quality of teaching (III)

**INSTRUCTION BY CORRESPONDENCE**—Approved instruction, usually received by the pupil outside the school plant, which provides for the systematic exchange between teacher and pupil of materials sent by mail. (IV, V, IVR)

**INSTRUCTION FOR HOMEBOUND STUDENT**—Individual instruction by a teacher usually at the home of a student who is unable to attend classes. In some instances, such instruction is augmented by telephone communication between the classroom and the student or by other means. (IV-V, VI-IVR-VR)

**INSTRUCTION PROGRAMER**—A staff member performing the assigned activities of providing precise sequences of information to pupils through devices such as teaching machines for the purpose of bringing about maximum learning. (IV)

**INSTRUCTION ROOM**—Any room which was originally designed, or later adapted, to accommodate some form of group instruction on a day-by-day basis and which is available for such purposes. "Adapted," as used here, means that the area of the room has been changed, through the movement of the fixed walls or partitions of the room, for the purpose of converting it to an instruction room. Special instruction rooms should be included, but areas such as auditoriums, gymnasiums, lunchrooms, libraries, study halls, and multipurpose rooms should not be included as instruction rooms. (I)

**INSTRUCTIONAL EQUIPMENT**—Equipment used by pupils and instructional staff in the instructional program. (III)

**INSTRUCTIONAL LEVEL**—An indication of the general nature and difficulty of instruction, e.g., elementary instructional level, secondary instructional level, and postsecondary instructional level. (V, VI, VII, IVR, VR)

**INSTRUCTIONAL MATERIALS CENTER**—An instructional space where school library services and audiovisual services are integrated. When such services are limited to one or more specific subject areas, the space may be referred to as "resource center." For inventory purposes, an instructional materials center is considered to be a school library instructional space. (VI) *See also* **RESOURCE CENTER**.

**INSTRUCTIONAL ORGANIZATION**—A school or other organizational arrangement which provides instruction of a given type or types. (IV-V-IIR, IVR)

**INSTRUCTIONAL PERSONNEL**—Those who render direct and personal services which are in the nature of teaching. Included here are teachers (including teachers of homebound), teaching assistants, teacher aides, secretaries for teachers, special graders, substitute teachers, and clerks serving teachers only. Attendance personnel, health personnel, and other clerical personnel should not be included as instructional personnel. (I, II, III, IV-IIR, IVR)

**INSTRUCTIONAL STAFF TRAINING SERVICES**—Activities designed to contribute to the professional or occupational growth and competence of members of the instructional staff during the time of their service to the LEA or school. Among these activities are workshops, demonstrations, school visits, courses for college credit, sabbatical leaves, and travel leaves. (IIR, IVR)

**INSTRUMENT MAINTENANCE AND REPAIR OCCUPATIONS** (subject matter)—See appendix, p. 260.

**INSTRUMENTAL MUSIC** (subject matter)—See appendix, p. 223.

**INSURABLE VALUE**—Current replacement cost of a piece of property less deductions for depreciation and noninsurable items. (III)

**INSURABLE VALUE OF A BUILDING**—Current replacement cost less deductions for depreciation and noninsurable items.

The replacement cost of a building can be determined in several different ways. One of these methods is through comparison of the building with a recently erected building of similar quality and facilities for which cost figures are available. Another method is through the application of a cost factor per square foot of floor area or per cubic foot of volume. Another is through the application of building cost indices which make it possible to determine a percentage increase or decrease in building costs over the years that in turn can be applied to the original cost of buildings to derive estimates of replacement cost. Still another method is through a detailed appraisal showing the quantity of materials, the amount of labor, and the total cost of each needed to replace the building at current prices. (III)

**INSURABLE VALUE OF EQUIPMENT**—Its present worth. (III) See also **REPLACEMENT COST OF EQUIPMENT**.

**INSURANCE** (subject matter)—See appendix, p. 000.

**INSURANCE AND BOND PREMIUMS**—Expenditures for all types of insurance coverage such as property, liability, fidelity, bond premiums, as well as the costs of judgments. Insurance for group health, workmen's compensation, etc., are not charged here, but are recorded under Personal Services—Employee Benefits. (IIR)

**INSURANCE AND RISK** (subject matter)—See appendix, p. 000.

**INTEGRATION**—The process of combining subject-matter content from various subject-matter areas into one unified course, project, or unit, e.g., interrelating the teaching of history, geography, science, art, music, and English language arts in the study of the Westward Movement. (VI)

**INTEREST**—A fee charged a borrower for the use of money. (II, III, IIR) See also **DEBT SERVICE**.

**INTEREST AND RECEIVABLES**—Interest received on temporary or permanent investments in the United States Treasury bills, notes, bonds, savings accounts, time certificates of deposit, notes, mortgages, or other interest-bearing obligations and dividends received on stocks. (IIR)

**INTEREST GROUP**—A group organized to secure certain objectives which the members value or regard as beneficial to themselves. Interest groups, sometimes referred to as special interest groups, frequently represent particular economic interests—for example, organized labor, large manufacturers, small businessmen, farmers, professional organizations. Interest groups also may be organized to secure noneconomic objectives or objectives that are not purely economic. An interest group may, for example, be a religious group, an ethnic or racial group, an association concerned with saving historic landmarks, or a rifle association. Interest groups play a particularly important role in a large, representative democracy, where they seek to exert influence over the passage of legislation and the actions of governmental agencies. (Unpublished VIII)

**INTEREST INVENTORY**—An examination used to



measure a person's likes and dislikes, typically determining the extent to which a person's pattern of likes and dislikes corresponds to those of persons who are known to be successfully engaged in a given vocation, school subject, program of studies, or other activity. (VR)

**INTEREST RECEIVABLE ON INVESTMENTS**—The amount of interest receivable on investments, exclusive of interest purchased. Interest purchased may be shown in a separate account. (IIR)

**INTERFUND TRANSFERS**—Money which is taken from one fund under the control of the board of education and added to another fund under the board's control. Interfund transfers are not receipts or expenditures of the LEA. (II-IIB-IIR)

**INTERMEDIATE ADMINISTRATIVE UNIT**—An administrative unit smaller than the State which exists primarily to provide consultative, advisory, administrative, or statistical services to local basic administrative units, or to exercise certain regulatory functions over local basic administrative units. An intermediate unit may operate schools and contract for school services, but it does not exist primarily to render such services. Such units may or may not have taxing and bonding authority. Where there is a supervisory union board, the union is included as an intermediate unit. (I, II-IV, V, VI, VII, IIR, VR)

**INTERMEDIATE ELEMENTARY GRADES**—The grades between the primary grades and the upper elementary grades or the junior high school, usually grades 4, 5, and 6. (IV, V, VI, VII)

**INTERMEDIATE ELEMENTARY LEVEL** (including years or grades 4, 5, and 6 or equivalent)—Usually includes education in the years or grades 4, 5, and 6 or the equivalent. In practice, instruction frequently takes place in a self-contained class. (VI)

**INTERMEDIATE SOURCES OF REVENUE**—An intermediate administrative unit or a political subdivision between LEA's and the State that collects revenue and distributes it to LEA's in amounts different from those which are collected within such system. (II, IIR)

**INTERN**—A staff member who is performing assigned activities which are part of an internship plan of a college or local school system providing for the periodic supervision of the staff member by personnel

of the college or school system as he performs his assigned activities. (IV) *See also* **TEACHING INTERN ASSIGNMENT** and **ADMINISTRATIVE INTERN ASSIGNMENT**.

**INTERNAL AUDITING SERVICES**—Activities concerned with verifying the account records, including evaluating the adequacy of the internal control system, verifying and safeguarding assets, reviewing the reliability of the accounting and reporting systems, and ascertaining compliance with established policies and procedures. (IIR, IVR)

**INTERNAL CONTROL**—A plan of organization under which employees' duties are so arranged and records and procedures so designed as to make it possible to exercise effective accounting control over assets, liabilities, revenues, and expenditures. For example, under such a system, the employees' work is subdivided so that no one employee performs a complete cycle of operations. For instance, an employee handling cash would not post the accounts receivable records. Again, under such a system, the procedures to be followed are definitely laid down and such procedures call for proper authorizations by designated officials for all actions to be taken. (II, IIR)

**INTERNAL EVALUATION**—The process used by personnel responsible for the conduct and operation of a program to determine the degree to which it has fulfilled its stated objectives. (Unpublished IX)

**INTERNAL INFORMATION SERVICES**—Activities concerned with the writing, editing, and communication of administrative information to pupils and staff. (IIR, IVR)

**INTERNAL SERVICES** (local education agency)—Activities concerned with buying, storing, and distributing supplies, furniture, and equipment, as well as activities concerned with duplicating and printing for the LEA. (IIR, IVR)

**INTERNAL SERVICES** (State education agency)—Those functions or activities which are necessary for and relate to the actual operation of the State department of education. This excludes those services which are rendered primarily for the benefit of agencies or institutions outside the State department of education. (VII)

**INTERNATIONAL TRADE** (subject matter)—*See* appendix, p. 165.

**INTERPERSONAL AND BEHAVIORAL COPING SKILLS** (subject matter)—See appendix, p. 269.

**INTERSCHOLASTIC ATHLETICS**—Organized games and athletic activities engaged in by pupils specifically trained for such purposes with similarly trained pupils from other schools. (VI)

**INTERSTATE MIGRATORY CHILD**—As defined for Federal compensatory education programs, a child who has moved with a parent or guardian within the past year across State boundaries in order that a parent, guardian, or other member of this immediate family might secure temporary or seasonal employment in an agricultural activity. (VR)

**INTRAMURAL ATHLETICS**—Organized games and athletic activities engaged in by pupils of a school with other pupils from the same school. The intramural program may be an integral part of the physical education program or a distinctive program of its own; in either case, the program must be confined to a single school. (VI)

**INTRASTATE MIGRATORY CHILD**—As defined for Federal compensatory education programs, a child who has moved with a parent or guardian within the past year across school district boundaries within a State in order that a parent, guardian, or other member of his immediate family might secure temporary or seasonal employment in an agricultural activity. (VR)

**INTRODUCTION TO ANALYSIS** (subject matter)—See appendix, p. 220.

**INVASION**—The interpenetration of one population group or use area by another, the difference between the new and old being economic, social, or cultural. (Unpublished VIII)

**INVENTORY**—A detailed list or record showing quantities, descriptions, values, and frequently, units of measure and unit prices of property on hand at a given time. Also, the cost of supplies and equipment on hand not yet distributed to requisitioning units. (II, III, IIB, IIR)

**INVENTORY OF STORES FOR RESALE**—The value of goods held by an LEA for resale rather than for use in its own operations. (IIR)

**INVESTMENT BUILDING**—A building that has been

acquired by the school district for investment purposes and is held to produce revenue for the support of schools. (III)

**INVESTMENT IN GENERAL FIXED ASSETS**—An account in the General Fixed Assets group of accounts which represents the LEA's equity in general fixed assets. The balance of this account is subdivided according to the source of funds which financed the asset acquisition, such as General Fund revenues, Special Revenue Fund revenues, etc. (IIR)

**INVESTMENTS**—Securities and real estate held for the production of income in the form of interest, dividends, rentals, or lease payments. The account does not include fixed assets used in LEA operations. (II, III-IIB-IIR)

**INVESTMENTS** (subject matter)—See appendix, p. 158.

**INVOICE**—An itemized list of merchandise purchased from a particular vendor. The list includes quantity, description, price, terms, date and the like. (II-IIB, IIR)

**INVOLUNTARY SEPARATION**—Separation resulting from a decision made solely by the LEA after due process. (IV-IVR)

**ITEM OF INFORMATION** (curriculum and instruction)—A descriptive heading under which is recorded information about curriculum and instruction. (VI)

**ITEM OF INFORMATION** (staff)—A descriptive heading under which staff information may be recorded. The item may be part of a record or part of a report, depending on the manner in which it is used. (IV)

**ITEM OF INFORMATION** (students)—A descriptive heading under which is recorded information about students. (V, VR)

—J—

**JANITOR**—See CUSTODIAN.

**JOB-ENTRY LEVEL OF EMPLOYMENT**—A level of employment in which a person may be employed on the basis of his education and training, without previous related work experience. (VR)

**JOB SOURCE CLUSTER**—Those parts of the economic community which provide the larger part of community employment; usually identified by industry groups. (Unpublished VIII)

**JOURNAL**—The accounting record in which the details of financial transactions are first recorded. (II, III-IIB, IIR)

**JOURNAL ENTRY**—See ENTRY.

**JOURNAL VOUCHER**—A paper or form on which the financial transactions of the LEA are authorized and from which any or all transactions may be entered in the books. By means of the journal voucher, the budget may be put into operation and expenditures made to meet authorized obligations. Journal vouchers are also used to set up revolving funds and petty cash funds, and for authorizing all entries in the book-keeping system for which no other authorizations, such as deposit slips, invoices, etc., are available. A form of journal voucher is a memorandum in the school board minutes. (II, III, IIR)

**JUDGMENT**—An amount to be paid or collected by the LEA as the result of a court decision. (II, IIR)

**JUDGMENTS AGAINST THE LEA**—Expenditures from current funds for all judgments (except as indicated) against the LEA that are not covered by liability insurance, but are of a type that might have been covered by insurance. Only amounts paid as the result of court decisions are recorded here. Judgments against the LEA resulting from failure to pay bills or debt service, are recorded under the appropriate expenditure accounts as though the bills or debt service had been paid when due. (IIR)

**JUDGMENTS PAYABLE**—Amounts due to be paid by an LEA as the result of court decisions, including condemnation awards in payment for private property taken for public use. (IIR)

**JUDICIARY ACTIVITIES (State education agency)**—Activities whereby the State education authority or the chief State school officer serves as a tribunal in holding hearings and rendering decisions regarding education-related controversies within the State. (VII)

**JUNIOR COLLEGE**—A postsecondary institution which offers the first 2 years of college instruction, frequently confers an associate degree, and does not

confer a bachelor's degree. The term "junior college" is often used interchangeably with the term "community college." (I, II-IV, V-VI-VII, IIR, IVR) See also COMMUNITY/JUNIOR COLLEGE.

**JUNIOR HIGH SCHOOL**—A separately organized and administered secondary school intermediate between the elementary and senior high schools, usually including grades 7, 8, and 9 (in a 6-3-3 plan) or grades 7 and 8 (in a 6-2-4 plan). (I, II, III-IV-V-VI-IIR, IVR-VR)

**JUNIOR ROTC (subject matter)**—See appendix, p. 281.

**JUNIOR-SENIOR HIGH SCHOOL**—A secondary school organized on a junior-senior basis and administered under one head as one unit. This includes secondary schools organized on a 2-year junior and a 4-year senior high school plan, a 3-year junior and 3-year senior high school plan, and any other plan based on a junior-senior organization. (I, II, III, IV, V, VI, VII, IIR, IVR, VR)

**JUVENILE**—An individual who is under the legal age at which persons are considered responsible adults. (Unpublished VIII)

**JUVENILE DELINQUENT**—An offender against the laws of society who, because of his age, is not considered a criminal. While the term "juvenile delinquent" often is applied to all youthful offenders tried in juvenile court, these children technically are not legally delinquent until adjudged so by the court. (V, VI, VR) See also DELINQUENT BEHAVIOR.

—K—

**KINDERGARTEN**—A group or class that is organized to provide educational experiences for children for the year immediately preceding the first grade. A kindergarten class may be organized as a grade of an elementary school or as part of a separate kindergarten school. In some LEA's these groups may be called preprimary, junior primary, or primary. (I, II, III-IV, V-VI-VII, IIR, IVR)

**KINDERGARTEN ROOM**—A special instructional space designed, or provided with special built-in equipment, for use by a group or class that is organized to provide educational experiences for children for the

year or years preceding the first grade. (III-VI) *See also* SPECIAL CLASSROOM.

**KINDERGARTEN SCHOOL**—An elementary school only for children in their kindergarten year. (IV, V) *See also* KINDERGARTEN and ELEMENTARY SCHOOL.

—L—

**LABOR FORCE SHORTAGE**—The number of workers needed, in addition to current supply, in a particular industry group as reported by the local or State office of a State's division of employment security (or its equivalent). (Unpublished VIII)

**LABOR FORCE SURPLUS**—The number of individuals seeking work in a particular industry as reported by the local or State office of a State's division of employment security (or its equivalent). (Unpublished VIII)

**LABOR MARKET AREA**—The area within which workers compete for jobs and employers compete for workers and for which labor market data are periodically published by the U.S. Department of Labor. (Unpublished VIII)

**LABOR TURNOVER**—Actual figures on estimates of the proportion of the labor force, in any one or all components of economic activity, which requires replacement during a year. (Unpublished VIII)

**LABORATORY, MODEL, OR PRACTICE SCHOOL**—An elementary or secondary school in which part or all of the teaching staff consists of cadet or student teachers and the control and operation of the school rests with an institution which prepares teachers. (I-V, VI, VR)

**LABORATORY ROOM**—A special instructional space designed, or provided with special built-in equipment, for pupil participation in learning activities involving scientific or applied experimentation, e.g., a laboratory in one of the sciences, mathematics, languages, driver education, or practical or performing arts. (III-VI)

**LABORER (assignment)**—A grouping of manual assignments which generally require no special training. All laborers performing lifting, digging, mixing, loading, and pulling operations would be classified in this

general job classification. Under the Laborer classification, the one fairly common specific activity assignment associated with an LEA is groundskeeping; other activity assignments may be added by the local administrator if needed by a particular LEA. (IV-IIR, IVR)

**LAND**—A fixed asset account which reflects the acquisition value of land owned by an LEA. If land is purchased, this account includes the purchase price and costs such as legal fees, filling and excavation costs, and other associated improvement costs which are incurred to put the land in condition for its intended use. If land is acquired by gift, the account reflects its appraised value at time of acquisition. (IIR)

**LAND ACQUISITION AND DEVELOPMENT SERVICES**—Activities concerned with the initial acquisition of sites and improvements thereon. (IIR, IVR)

**LAND PARCEL MAPS (OR PROPERTY MAPS)**—Maps showing the boundaries, size, and relative position of each land parcel (lot) in the community. (Unpublished VIII)

**LAND USE COMPATIBILITY**—An assessment of the probabilities that two unlike and neighboring land uses can each function efficiently with no ill effects on the other. (Unpublished VIII)

**LAND USE MAP**—A graphic presentation of dominant land uses by activity groups, each with its assemblage of specific land uses. (Unpublished VIII)

**LANDSCAPING**—The arrangement of the topography and plantings of a site for the best aesthetic effect in view of use to which the land is being put. It includes such work as preparing landscape plans; soil analysis; preparing the ground for planting; planting grass, shrubs, or trees; and general grading that is not specifically for outdoor service systems, play areas, fences and retaining walls, or construction of buildings. (III)

**LANGUAGE HANDICAPPED**—Individuals with markedly impaired language. (VR) *See also* LANGUAGE IMPAIRMENT.

**LANGUAGE IMPAIRMENT**—A disability in verbal learning resulting in markedly impaired ability to acquire, use, and comprehend spoken and written language. Persons considered to have a language impair-

ment as a primary disabling condition exhibit a significant discrepancy between their intellectual level of functioning and their level of language performance. In some cases, there may also be present some degree of sensory or motor incapacity, mental retardation, emotional maladjustment, or environmental disadvantage. (VR)

**LANGUAGE LABORATORY**—A room equipped for language instruction in which tape recorders, projectors, record players, and other devices are used singly or in combination. (VI)

**LANGUAGE SKILLS (subject matter)**—See appendix, p. 173.

**LAY READERS**—Persons, usually housewives who are college graduates, who are not teachers but who read and help mark English compositions on a part-time basis under the supervision of a fully qualified classroom teacher. (VI)

**LEA**—See LOCAL EDUCATION AGENCY.

**LEARNING COMMUNITY**—A purposefully organized group of people working together to increase their knowledge, skills, and sensitivity. (Unpublished IX)

**LEARNING DISABLED**—Individuals with specific learning disabilities. (VR) See also CHILDREN WITH SPECIFIC LEARNING DISABILITIES.

**LEARNING RESOURCES CENTER**—See INSTRUCTIONAL MATERIALS CENTER.

**LEATHERWORKING (subject matter)**—See appendix, p. 265.

**LEAVE**—Any grant of legitimate absence of the staff member from duty assignment that does not affect his employment status. (IV, IVR)

**LEDGER**—All the accounts of a particular fund or all those detail accounts which support a particular General Ledger account. (II-IIB, IIR) See also GENERAL LEDGER; APPROPRIATION LEDGER, and ALLOTMENT LEDGER.

**LEDGER, ALLOTMENT**—See ALLOTMENT LEDGER.

**LEDGER, APPROPRIATION**—See APPROPRIATION LEDGER.

**LEDGER, COST**—See COST LEDGER.

**LEDGER, GENERAL**—See GENERAL LEDGER.

**LEDGER, GENERAL PROPERTY**—See GENERAL PROPERTY LEDGER.

**LEDGER, REVENUE**—See REVENUE LEDGER.

**LEDGER, SUBSIDIARY**—See SUBSIDIARY LEDGER.

**LEGAL ADULT**—A person who has reached a specified minimum legal age of adulthood. (VR) See also ADULT.

**LEGAL ASSIGNMENT**—An assignment to a staff member (qualified to practice law) to perform such activities as conducting lawsuits, drawing up legal documents, and advising the LEA on legal rights. (IIR, IVR)

**LEGAL MINOR**—A person who has not reached a specified minimum legal age of adulthood. (VR)

**LEGAL SERVICES**—Activities pertaining to counseling services provided to the board of education in regard to laws and statutes. (IVR)

**LENGTH OF TERM IN DAYS**—The number of days school was actually in session during the year. Only days on which the school is open and the pupils are under the guidance and direction of teachers in the teaching process should be considered as days in session. On some days the school plant itself may be closed and the student body as a whole engaged in school activities outside the school plant under the guidance and direction of teachers. Such days should be considered as days in session. Days on which school is closed for such reasons as holidays, teachers' institutes, and inclement weather should not be considered as days in session. (This should be the length of term used for computing ADA and ADM.) (I)

**LESS-THAN-FULL-TIME ASSIGNMENT**—Assigned activities within an assignment classification which do not require all of the time of a full-time staff member to perform. (IV) See also STAFF ASSIGNMENT WORKLOAD.

**LETTER OF CREDIT**—A letter from a bank or agency asking that the holder of the letter be allowed to draw

a specified sum from other banks or agencies, to be charged to the account of the writer of the letter. (VII)

**LEVEL OF PERFORMANCE**—A predetermined level or stage of performance, or degree of proficiency, as designated by a school or school system. (VI)

**LEVY**—(verb) To impose taxes or special assessments. (noun) The total of taxes or special assessments imposed by a governmental unit. (II, IIR)

**LIABILITIES**—Debt or other legal obligations arising out of transactions in the past which are payable but not necessarily due. Encumbrances are not liabilities; they become liabilities when the services or materials for which the encumbrance was established have been rendered or received. (II, III, IIR, IVR)

**LIABILITY INSURANCE**—Expenditures for insurance coverage of the LEA, or its officers, against losses resulting from judgments awarded against the system. Also recorded here are any expenditures (not judgments) made in lieu of liability insurance. (IIR, IVR)

**LIBERAL ARTS MATHEMATICS** (subject matter)—*See* appendix, p. 000.

**LIBRARIAN**—A staff member performing assigned professional library service activities. (IV) *See also* **LIBRARIAN ASSIGNMENT**.

**LIBRARIAN ASSIGNMENT**—An assignment to a staff member to perform professional library service activities such as ordering, cataloging, processing, and circulating books and other materials; planning the use of the library by teachers, pupils, and others, selecting books and materials, participating in faculty planning for the use of books and materials, and guiding teachers, pupils, and others in the use of the library in schools or community service programs. (IV)

**LIBRARIAN/MEDIA ASSIGNMENT**—An assignment to develop plans for and the use of teaching and learning resources, including equipment, content material, and services. (IIR, IVR)

**LIBRARY BOOKS**—Books purchased for general use and not primarily for use in certain classes, grades, or other particular student groups. They include reference sets and dictionaries, but not textbooks and periodicals. (III, VII, IIR, IVR)

**LIBRARY BOOKS PER PUPIL**—The number of volumes of library books in the library(s) of a school or school system divided by a pupil unit of measure. (VI)

**LIBRARY SERVICES STAFF PER 1,000 STUDENTS IN AVERAGE DAILY ATTENDANCE**—The number representing the total full-time equivalency of library service staff assignments in a school or school system during a given period of time, multiplied by 1,000 and divided by the average daily attendance of students during this period. (VR)

**LICENSE**—The legal document giving authorization from the State (or an agency or an organization authorized by the State) to perform certain specific services in the field of education. (Sometimes used synonymously with "certificate.") (VII, IVR)

**LIFE TABLE**—A statistical table that presents the death rate and life expectancy of each of a series of age-sex categories of a particular population at a particular point in time. (Unpublished VIII)

**LIFELONG LEARNING**—The process by which an adult continues to acquire, in a conscious manner, formal or informal education throughout his life span, either to maintain and improve his vocational viability or for his personal development. (Unpublished IX)

**LINE-ITEM STRUCTURE**—A budgetary format wherein certain estimated receipts and expenditures appear on a given line and must be restricted to one specific purpose, such funds cannot be commingled with others. (VII)

**LINGUISTICS** (subject matter)—*See* appendix, p. 174.

**LIQUIDATION**—A reduction of encumbrances. (IIB)

**LITERATURE** (subject matter)—*See* appendix, p. 176.

**LOANS**—*See* **BOND**; **CURRENT LOAN**; **LONG-TERM LOAN**; and **SHORT-TERM LOAN**.

**LOANS RECEIVABLE**—Amounts which have been loaned to persons or organizations, including notes taken as security for such loans, where permitted by statutory authority. The account is usually carried only in the Trust and Agency Funds balance sheet. (IIR)

**LOCAL BASIC ADMINISTRATIVE UNIT**—An administrative unit at the local level which exists

primarily to operate public schools or to contract for public school services. Normally, taxes can be levied by such units for school purposes. These units may or may not be coterminous with county, city, or town boundaries. This term is used synonymously with the terms "school district," and "local education agency." (I, II, III-IV, V-VI, VII-VR)

**LOCAL EDUCATION AGENCY (LEA)**—An educational agency at the local level which exists primarily to operate schools or to contract for educational services. Normally, taxes may be levied by such publicly operated agencies for school purposes. These agencies may or may not be coterminous with county, city, or town boundaries. This term is used synonymously with the terms "school district," "school system," and "local basic administrative unit." (VI-IIR, IVR) *See also LOCAL BASIC ADMINISTRATIVE UNIT.*

**LOCAL SCHOOL DISTRICT**—*See LOCAL BASIC ADMINISTRATIVE UNIT.*

**LOCATION**—The address of the operational unit within the LEA to which an expenditure is to be charged. (VII-IVR)

**LONG-TERM LOAN**—A loan which extends for more than five years from the date the loan was obtained and is not secured by serial or term bonds. (II, IIR)

**LOSSES OF PROPERTY**—Property that has been stolen, lost, destroyed, or damaged beyond repair. (III)

**LUNCHROOM**—*See CAFETERIA*

—M—

**MACHINE DATA PROCESSING**—The use of machines and devices in the storing of individual items of information in a form by which they may be retrieved rapidly and accurately, processed, and reproduced as single-line items, as lists of items or desired combinations with other items. (VII, IIR, IVR) *See also AUTOMATIC DATA PROCESSING.*

**MACHINE PROGRAMER**—A staff member performing the assigned activities of developing precise sequences of machine-coded instructions for data processing machines. (IV)

**MACHINERY**—Movable equipment items composed of complex combinations of parts which transmit and modify force and motion so as to perform some desired kind of work, excluding vehicles. (III, VII, IVR)

**MAINTENANCE AND OPERATION AREAS**—Areas designed, or adapted, for use in making repairs to a school plant and keeping it open and ready for use. They include such areas as furnace rooms, pump rooms, fan rooms, and other mechanical service areas; fuel storage rooms, custodial quarters, receiving areas, building work or repair shops, custodial service closets, and other similar building service areas. (III)

**MAINTENANCE BUILDING**—A building used primarily for housing personnel and equipment engaged in activities concerned with the repair and upkeep of grounds, buildings, and equipment, or with the manufacture of equipment. This includes building facilities for carpenters, cabinet makers, machinists, mechanics, painters, plumbers, electricians, and groundskeepers. (III)

**MAINTENANCE OF PLANT (PLANT REPAIRS AND REPAIR AND REPLACEMENT OF EQUIPMENT)**—Those activities which are concerned with keeping the grounds, buildings, and equipment at their original condition of completeness or efficiency, either through repairs or by replacements of property (anything less than replacement of a total building). (I-II, III, IV, IIR)

**MAINTENANCE PERSONNEL**—Personnel on the school payroll who are primarily engaged in the repairing and upkeep of grounds, buildings, and equipment. (I, II, III-IV, IIR, IVR)

**MAINTENANCE WAREHOUSE**—A building used primarily for housing personnel and equipment engaged in activities concerned with the repair and upkeep of grounds, buildings, and equipment, or with the manufacture of equipment. This includes building facilities for carpenters, cabinet makers, machinists, mechanics, painters, plumbers, electricians, and groundskeepers. (IIR)

**MAJOR**—A concentration of semester hours of college credit representing major specialization in a field of study. The number of college credits constituting a major is usually specified in State certification requirements. (IV-VII, IVR)

**MAJOR FUNCTION** (State education agency)—The six major functions are as follows: (1) General Management, (2) Planning, Research, Development, and Evaluation, (3) Consultative Services, (4) Distribution of Resources, (5) Internal Services, and (6) Operation or Approval of Programs and Schools. (VII) *See also* FUNCTION.

**MAKESHIFT OR IMPROVISED INSTRUCTIONAL FACILITIES**—Any facility or space used for instruction room purposes but not designed or specifically adapted for such purposes. (I)

**MANAGEMENT**—Those activities which have as their purpose the general direction, execution, and control of the affairs of an agency or an organizational unit within the agency. (VII) *See also* ADMINISTRATION and OFFICIAL/ADMINISTRATIVE.

**MANAGEMENT INFORMATION SERVICES**—Activities concerned with the writing, editing, and other preparation necessary to disseminate to management (1) information needed about the operation of the LEA; and (2) information about the community, State, and nation, in order to make logical decisions. (IVR)

**MANAGEMENT INFORMATION SYSTEM**—A network of communication channels (voice, digital, etc.) that acquires, retrieves, and redistributes data used in managing the educational process and in supporting the individual and collective decisionmaking process. (VII-IRR)

**MANUAL DEXTERITY TEST**—An examination of a person's ability to move the hands easily and skillfully. Such a test may be used in the identification of aptitudes for certain occupations. (VR)

**MANUFACTURING** (subject matter)—*See* appendix, p. 203.

**MARINE CORPS JUNIOR ROTC** (subject matter)—*See* appendix, p. 289.

**MARITIME OCCUPATIONS** (subject matter)—*See* appendix, p. 261.

**MARK**—A rating of achievement or academic progress assigned on the basis of some predetermined scale; e.g., letters (A, B, C, D, F), numbers (4, 3, 2, 1, 0), words or phrases (outstanding, satisfactory, "is improvement), and percentages. (V, VI)

**MARKETING** (subject matter)—*See* appendix, p. 159.

**MARK-POINT AVERAGE**—A measure of average performance in all courses taken by a student during a marking period, school term, or year—or accumulated for several terms or years—obtained by dividing total mark points by total courses or by hours of instruction per week. (VI-VR)

**MARK-POINTS**—The specific numerical equivalents for marks sometimes appearing in the records of specific students for use in determining student mark-point averages. (VR) *See also* MARK VALUE and MARK-POINT AVERAGE.

**MARK VALUE**—The scale of numerical equivalents for marks awarded, indicating performance in school work and used in determining student mark-point averages, e.g., A=4, B=3, C=2, D=1. The specific numerical equivalents in student records may be referred to as "mark points." (VI, VR)

**MASONING ASSIGNMENT**—An assignment to perform activities involved with working with stone, brick, concrete, artificial stone, and the like in constructing, erecting, and repairing structures and fixtures. (II, IVR)

**MASTER PLAN (FOR A COMMUNITY)**—A document prescribing a general pattern of land use and population distribution, major arteries of movement, and systems of physical facilities for an area. (Unpublished VIII)

**MASTER'S DEGREE**—A graduate degree granted upon the completion of graduate work, usually the work of one year beyond the bachelor's degree. (IVR)

**MATAI-NAME**—In Samoa, the name of the head of the household or family which is different from the name of the father. This name is assumed when a person takes over responsibility for a family upon the death or disability of the father (or other provider). (VR)

**MATERIAL**—Tangible resources, including both supplies and equipment. (VII)

**MATERIALS SUPPORT OCCUPATIONS: TRANSPORTING, STORING, AND RECORDING** (subject matter)—*See* appendix, p. 234.

**MATERNITY LEAVE**—Leave, in addition to sick



leave, allowed a staff member before and after the birth of a child. (IV)

**MATHEMATICS** (subject matter)—See appendix, p. 205.

**MATHEMATICS (7TH AND 8TH GRADES)** (subject matter)—See appendix, p. 207.

**MATRON**—A female staff member performing assigned general housekeeping activities in the school plant. (IV)

**MATURED BONDS PAYABLE**—Bonds which have reached or passed their maturity date but which remain unpaid. (IIR)

**MATURED INTEREST PAYABLE**—Interest on bonds which has reached the maturity date but which remains unpaid. (IIR)

**MAXIMUM CLASS SIZE**—The membership of the largest class of a given type as of a given date. (VR)

**MEASURE**—A unit of measurement to which reference may be made for purposes of description, comparison, and evaluation. Many measures are obtained by computation involving one or more items of information. (IV, V, VI, IVR, VR)

**MECHANIC ASSIGNMENT**—An assignment to perform activities involved with inspecting, repairing, and maintaining functional parts of mechanical equipment and machinery. (IIR, IVR)

**MECHANICAL AND ELECTRICAL SERVICE ROOM**—Any room housing building furnaces, pumps, fans, generators, transformers, and similar mechanical and electrical service equipment. (III)

**MEDIAN**—The number which splits a frequency distribution into two equal parts, one above and one below the median. (Unpublished VIII)

**MEDIAN AGE OF STUDENTS**—For a given group of students, the age that evenly divides the distribution of students when classified by age, i.e., the age so selected that 50 percent of the students are older and 50 percent are younger. (V, VI, VR)

**MEDICAL LABORATORY TECHNOLOGY** (subject matter)—See appendix, p. 185.

**MEDICAL SERVICES**—Activities concerned with the physical and mental health of pupils, such as health appraisal, including screening for vision, communicable diseases, and hearing deficiencies; screening for psychiatric services; periodic health examinations; emergency injury and illness care; and communications with parents and medical officials. (IVR)

**MEMBERSHIP**—[The number of pupils on the current roll of a class or school as of a given date.] A pupil is a member of a class or school from the date he presents himself at school and is placed on the current roll until he permanently leaves the class or school for one of the causes recognized as sufficient by the State. The date of permanent withdrawal should be the date on which it is officially known that the pupil has left school, and not necessarily the first day after the date of last attendance. Membership is obtained by adding the total original entries and the total reentries and subtracting the total withdrawals; it may also be obtained by adding the total number present and the total number absent. This term is also known as the number belonging. (I, II, III-IV, V-VI-VII-IIR-IVR)

**MEMBERSHIP, AGGREGATE DAYS**—See **AGGREGATE DAYS MEMBERSHIP**.

**MEMBERSHIP, AVERAGE DAILY**—See **AVERAGE DAILY MEMBERSHIP**.

**MEMBERSHIP, DATE OF WITHDRAWAL FROM**—See **DATE OF WITHDRAWAL FROM MEMBERSHIP**.

**MEMBERSHIP, DAY OF**—See **DAY OF MEMBERSHIP**.

**MEMBERSHIP, PERCENTAGE IN**—See **PERCENTAGE IN MEMBERSHIP**.

**MEMBERSHIP IN SPECIAL GROUPINGS AND/OR SPECIAL SCHOOLS**—The number of students on the current roll in special programs (e.g., in special classes, groups, or caseloads) and/or special schools as of a given date. (V-VR)

**MEMBERSHIP INFORMATION**—Information indicating the period of time the student's name is on the current roll of a class or school, regardless of his being present or absent. The membership of a class or school is the number of students on the current roll as of a given date. This may be obtained by a simple count or

by adding the total number present and the total number absent.

A student is a member of a class or school from the date he enters until his name is withdrawn from the rolls. During this period, the student is either present or absent on each day (or half day) during which school is in session. The date of withdrawal from membership is the first day after the date of last attendance, if known; otherwise, the date of withdrawal is considered to be the date on which it becomes known officially that the student left. Membership usually is terminated after excessive consecutive days of absence other than for long illness, or upon the completion of schoolwork, transferring to another school, discontinuance of school, or death. (VR)

**MEMBERSHIP STATUS, ACTIVE**—See **ACTIVE MEMBERSHIP STATUS**.

**MEMORANDUM ACCOUNTING**—An informal record of an LEA transaction that cannot be recorded under the regular financial accounts but for which a record is desired. (II-VII-IIR, IVR)

**MENTAL ABILITY (INTELLIGENCE) TEST**—An examination of a person's general ability to make successful and rapid adaptation to new situations and to learn from experience. (VR)

**MENTAL DISABILITY**—A deficiency in mental ability which limits or prevents successful participation in the educational program of the school system. (V)

**MENTAL HANDICAP**—An impairment in learning potential that adversely affects the performance of an individual. (V, VI) See also **MENTALLY RETARDED**.

**MENTAL HEALTH TECHNOLOGY** (subject matter)—See appendix, p. 188.

**MENTALLY DEFICIENT**—See **MENTALLY RETARDED**.

**MENTALLY GIFTED**—Individuals whose potential is so high or whose level of mental development is so far advanced that they have been identified by professionally qualified personnel as needing additional educational opportunities beyond what is provided by the usual school program if they are to be educated to the level of their ability. (V-VR)

**MENTALLY HANDICAPPED**—Individuals having a mental handicap. (V) See also **MENTAL HANDICAP**.

**MENTALLY RETARDED**—Individuals identified by professionally qualified personnel as being mentally retarded, according to degree of retardation. This includes those individuals whose level of mental development is such that they have been identified as unable, without special help, to profit from the usual school program. Children in this category are classified educationally as educable mentally retarded, trainable mentally retarded, and severely mentally retarded. (V-VI-VR)

**MESSENGER ASSIGNMENT**—An assignment to deliver messages, documents, packages, and other items to offices or departments within or outside the LEA. (IV, IIR, IVR)

**METALLURGY OCCUPATIONS** (subject matter)—See appendix, p. 262.

**METALS** (subject matter)—See appendix, p. 203.

**METALWORKING OCCUPATIONS** (subject matter)—See appendix, p. 261.

**MIDDLE/JUNIOR HIGH PROGRAMS**—Learning experiences concerned with the knowledge, skills, appreciations, attitudes, and behavioral characteristics which are considered to be needed by all pupils in terms of understanding themselves and their relationships with society and various career clusters and which normally may be achieved during the middle/junior high school years as defined by applicable State laws and regulations. (IIR, IVR)

**MIDDLE/JUNIOR HIGH SCHOOL**—A term describing a school organization between an elementary school and a high school. This term is used for budget purposes, usually, when middle and junior high schools need to be grouped for planning. Any other type organization by any other name, falling between the elementary and high schools, should be included. (IIR, IVR)

**MIDDLE SCHOOL**—A separately organized and administered school usually beginning with grade 5 or 6, with a program designed specifically for the early adolescent learner. Most middle schools presume, in ultimate plan if not in present reality, a 4-year high school for the grade or grades which follow, as in a 4-4-4 plan or a 5-3-4 plan. (VI-VII-IIR, IVR-VR)

**MIGRANT AGRICULTURAL WORKER**—See **MIGRATORY AGRICULTURAL WORKER**.

**MIGRANT CHILDREN**—See **MIGRATORY CHILDREN**.

**MIGRANT EDUCATION**—A program of instruction and services for those children who move periodically with their families from one school district to another in order that a parent or other member of the immediate family may secure seasonal employment. (VII, IVR)

**MIGRANT WORKER**—See **MIGRATORY WORKER**.

**MIGRATORY AGRICULTURAL WORKER**—An individual whose primary employment is in one or more agricultural activities on a seasonal or other temporary basis and who establishes a temporary residence, with or without his family, for the purpose of such employment. (V-VR) See also **AGRICULTURAL ACTIVITIES**.

**MIGRATORY CHILDREN**—Children whose parents are migratory workers, and who accompany their parents from one temporary residence to another. For school purposes, the term refers to such children within the age limits for which the local school district provides free public education. (V-VI-VR) See also **MIGRATORY AGRICULTURAL WORKER**.

**MIGRATORY CHILDREN OF MIGRATORY AGRICULTURAL WORKERS**—Children accompanying a parent whose primary employment is in one or more agricultural activities on a seasonal or other temporary basis and who establishes a temporary residence for the purposes of such employment. For school purposes, the term refers to such children within the age limits for which the local school district provides free public education. Regulations of some States require that such children should be identified according to whether their parents are American citizens or aliens. (VR)

**MIGRATORY WORKER**—An individual whose primary employment is on a seasonal or other temporary basis and who establishes a temporary residence, with or without his family, for the purpose of such employment. (V, VI-VR) See also **MIGRATORY AGRICULTURAL WORKER**.

**MILITARY LEAVE**—Leave, without loss of tenure,

allowed a staff member while in the armed forces. (IV, IVR)

**MILITARY SERVICE STATUS**—The nature of previous and current service of the staff member in the armed forces, including type of discharge or separation, dates of active service, veteran's privileges, and current military status, if any. (IV, IVR)

**MINIMUM PATH STREET PATTERNS**—The determination of that route which will minimize the total distance to be covered in the redistribution of a group (as of students) from the point of origin (the school) to the set of residences which are the destinations of the members of the group. (Unpublished VIII)

**MINIMUM PERMISSIBLE CLASS SIZE**—The smallest number of students to be assigned to a class of a given type, below which the class may be cancelled. (VR)

**MINOR**—A concentration of semester hours or quarter hours of college credit earned and representing specialization (but not major specialization) in a field of study. The number of college credits constituting a minor is usually specified in State certification requirements. (IV-VII, IVR)

**MINOR CIVIL DIVISION**—A political or administrative subdivision set up by the State, and including a variety of types (such as county, town, township, election district) used by the Bureau of the Census for presentation of statistics. (Unpublished VIII)

**MINORITY GROUP**—Any recognizable racial, religious, or ethnic group in a community that suffers some disadvantage due to prejudice or discrimination. This term, as commonly used, is not a technical term, and indeed it is often used to refer to categories of people rather than groups, and sometimes to majorities rather than minorities. For example, though women are neither a group (but rather a social category) nor a minority, some writers call them a minority group because supposedly a male-oriented society discriminates against women. On the other hand, a group which is privileged or not discriminated against but which is a numerical minority would rarely be called a minority group. Thus, as the term is often used, a minority group need be neither a minority nor a group, so long as it refers to a category of people who can be identified by a sizable segment of the population as objects for prejudice or discrimination. (Unpublished VIII)

**MIXED CONSTRUCTION**—A building with one or more sections of one type of construction and one or more sections (as additions) of another type of construction. (III) *See also* **COMBUSTIBLE BUILDING; FIRE-RESISTIVE BUILDING; and SEMI-FIRE-RESISTIVE BUILDING.**

**MOBILE CLASSROOM**—A vehicle which serves as a classroom and which may be moved readily at any time. (III, VI) *See also* **VEHICLE.**

**MODEL**—A representation made to be copied, followed, or imitated because of its feasibility, excellence, or worth. (VI-VII, IVR)

**MODEL SCHOOL**—*See* **LABORATORY, MODEL, or PRACTICE SCHOOL.**

**MODERATELY MENTALLY RETARDED**—*See* **EDUCABLE MENTALLY RETARDED.**

**MODERN FOREIGN LANGUAGES** (subject matter)—*See* appendix, p. 182.

**MODERNIZATION OF A BUILDING**—The changing of the design, fixtures, fittings, furnishings, appearance, and service systems of a building in order to bring it up to a contemporary state consistent with the needs of changing educational programs (III)

**MONITORING ASSIGNMENT**—An assignment to perform such activities as helping to keep order on buses and playgrounds and in lunchrooms, and taking attendance. This assignment would include traffic guards for loading buses. (IIR, IVR)

**MONITORING SERVICES**—A set of procedures and programs for a computerized information system that are designed to check recorded or transmitted signals in the process of inputting or retrieving information from data files. (IVR)

**MONITORING SYSTEM**—A set of procedures and programs for a computerized information system that are designed to check recorded or transmitted signals in the process of inputting or retrieving information from data files. (VR)

**MOTORIC SKILLS** (subject matter)—*See* appendix, p. 269

**MOVABLE EQUIPMENT**—Equipment that is trans-

portable from one location to another without appreciable damage or change to the location from which it is removed or to the location where it is installed. (III, VI)

**MULTIGRADE CLASS**—A class composed of pupils in 2 or more grades and having no particular differences in learning experiences due to grade standing of pupils, e.g., a secondary school general science class for freshmen and sophomores. (VI) *See also* **MULTI-GRADED CLASS and UNGRADED CLASS.**

**MULTIGRADED CLASS**—A class including more than one grade and in which pupils may be identified by grade level, e.g., the single class of a one-teacher school or one-room elementary school. (VI) *See also* **MULTI-GRADE CLASS and UNGRADED CLASS.**

**MULTIHANDICAPPED**—Having more than one handicapping condition. (V-VR)

**MULTIPLE-CAR RANGE**—A special off-street facility for in-car laboratory instruction where several automobiles may operate simultaneously under the direction of one or more teachers positioned outside the vehicles. (VI)

**MULTIPLE EXCEPTIONAL**—Individuals identified as possessing more than one type of exceptionality. (V) *See also* **TYPE OF EXCEPTIONALITY.**

**MULTIPLE HANDICAPPED**—*See* **MULTIHANDICAPPED.**

**MULTIPURPOSE ROOM**—An instructional space designed, or adapted, specifically for two or more of the combined functions that might normally be served by a separate library, separate audiovisual room, separate auditorium, separate gymnasium, separate gymnasium, separate cafeteria, or separate cafeteria, such as assemblies, physical education, lunch, music, clubs, audiovisual work, and library services. Separate gymnasiums and cafeterias are not classified as multipurpose rooms. (III-VI)

**MUNICIPAL STREETS**—All roads legally classed as municipal property and maintained by the municipality. Construction costs are financed by the municipality and with funds from the county and State under various funding and rebate programs. (Unpublished VIII)

**MUSIC** (subject matter)—*See* appendix, p. 222.

**MUSIC (GENERAL EDUCATION)** (subject matter)—*See* appendix, p. 222.

**MUSIC LITERATURE AND/OR HISTORY** (subject matter)—*See* appendix p. 222.

**MUSIC ROOM**—A special instructional space designed, or provided with special built-in equipment, for learning activities involving choral and instrumental music. (III-VI) *See also* **SPECIAL CLASSROOM**.

**MUSIC THEORY** (subject matter)—*See* appendix, p. 222.

—N—

**NATIONAL SCHOOL LUNCH PROGRAM**—A program whereby the Secretary of Agriculture assists State education agencies through grants-in-aid and other means to establish, maintain, operate, and expand school lunch programs in all schools making application for assistance and agreeing to operate a nonprofit lunch program in accordance with regulations of the National School Lunch Act, as amended. (VR)

**NATURAL SCIENCES** (subject matter)—*See* appendix, p. 224.

**NAVY JUNIOR ROTC** (subject matter)—*See* appendix, p. 285.

**NEGLECTED CHILD**—As defined for Federal compensatory education programs, a child residing in a public or private nonprofit residential institution (other than a foster home) which has assumed or been granted custodial responsibility for the child pursuant to State law, because of the abandonment or neglect by, or death of, parents or persons acting in the place of parents. (VR) *See also* **INSTITUTION FOR NEGLECTED CHILDREN**.

**NEGOTIATING ASSIGNMENT**—An assignment to perform such activities as resolving labor/management problems and helping to settle disputes and effect compromises. This assignment would include representatives of either management or labor (e.g., shop stewards). (IIR, IVR)

**NEIGHBORHOOD**—A small territorial unit, usually a subdivision of a larger community, in which there is some sense of local unity or identity. (Unpublished VIII)

**NEIGHBORHOOD AGENCIES AND ASSOCIATIONS**—An organized group from a local area characterized by general community interests and whose purpose it is to solve problems of the neighborhood (Unpublished VIII)

**NEIGHBORHOOD SCHOOL**—A school within easy walking distance of the pupils' homes. (VI)

**NET EXPENDITURE**—The actual outlay of money by the LEA for some service or object after the deduction of any discounts, rebates, reimbursements, or revenue produced by the service or activity. (II, IIR)

**NET INCOME**—The balance remaining to the LEA after deducting from the gross revenue for a given period all operating expense and income deductions during the same period. (IIR) *See also* **REVENUE**.

**NET MIGRATION**—The algebraic sum of in-migration and out-migration for a given county. (Unpublished VIII)

**NEUROLOGICAL HANDICAP**—A condition of the central nervous system which may result in disabilities such as post encephalitis and post meningitis. (VR) *See also* **ORTHOPEDICALLY HANDICAPPED; OTHER HEALTH IMPAIRED; and CHILDREN WITH SPECIFIC LEARNING DISABILITIES**.

**NO YEAR LEVEL**—In college, a designation for a student who previously has earned a degree or who is not enrolled in a degree program (VR)

**NONCATEGORICAL**—A term usually applied to revenue and meaning revenue from any or all sources which is not identifiable with specific expenditures, i.e., it is general fund revenue which loses its identity as it is expended for objects relating to many Service Areas. (IIR)

**NONCONFORMING LAND USES**—Land uses which do not accord with the provisions of a zoning ordinance. Most such nonconforming uses result from the continuation of a use instituted prior to the adoption of the zoning ordinance. (Unpublished VIII)

**NONCOURSE ACTIVITIES**—*See* **COCURRICULAR ACTIVITIES**.

**NONCREDIT COURSE**—A course for which students do not receive credit applicable toward graduation or

completion of a program of studies. (V-VI, VII, IVR, VR)

**NONEDUCATIONAL INSTITUTION**—A hospital, sanatorium, convalescent home, mental health clinic, orphanage, corrective institution, or other institution whose primary function is other than the operation of schools. (V, VR)

**NON-ENGLISH**—A language other than English or an English dialect, such as Arabic, Chinese, Czech, Danish, French, German, Greek, Hawaiian, Hebrew, Italian, Japanese, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, Yiddish, and a Native American Indian tribal language. (VR)

**NON-ENGLISH SPEAKING**—A term referring to pupils who do not speak English or who do not hear English spoken in their residence. (VI-IVR)

**NONGOVERNMENTAL AGENCY**—An instrumental-ity which is not under the authority of any govern-mental unit. (VII)

**NONGRADED CLASS**—*See* **UNGRADED CLASS**.

**NONGRADED SCHOOL**—*See* **UNGRADED SCHOOL**.

**NONINSTRUCTIONAL EQUIPMENT**—Equipment that is not used by pupils and instructional staff in the instructional program. (III)

**NONPROFESSIONAL**—A position which does not require extensive training (or a bachelor's degree) and which is not considered as professional under the laws and regulations established by the State. Examples are school lunch workers, school bus drivers, and cus-todians. (VII)

**NONPROFESSIONAL PERSONNEL**—Those personnel engaged in activities which are not considered to be professional in nature. (VII) *See also* **PROFESSIONAL** and **NONPROFESSIONAL**.

**NONPROMOTION**—The retaining of a pupil in his current grade at the end of the regular school term or at another time when most pupils are promoted. (V, VI)

**NONPUBLIC JUNIOR COLLEGE**—An independent or church-related junior college not supported by public funds. (IIR) *See also* **JUNIOR COLLEGE**.

**NONPUBLIC OWNERSHIP**—Proprietorship by a non-governmental agency. (VII)

**NONPUBLIC SCHOOL**—*See* **PRIVATE OR NON-PUBLIC SCHOOL**.

**NONPUBLIC SCHOOL PUPIL SERVICES**—Services to pupils attending a school established by an agency other than the State, subdivision of the State, or the Federal Government, which usually is supported pri-marily by other than public funds. The services consist of activities such as those concerned with providing instructional services, attendance and social work services, health services, and transportation services for nonpublic school pupils. (IVR)

**NONPUBLICLY-OWNED PROPERTY**—Any property used by the school district that is not publicly owned. (III) *See also* **PUBLICLY-OWNED PROPERTY**.

**NONRESIDENT STUDENT**—A student whose legal residence is outside the geographic area served by a specified school, LEA, or institution. (IIR, IVR) *See also* **RESIDENT STUDENT**.

**NONRESIDENT STUDENT OF ADMINISTRATIVE UNIT (OR SCHOOL DISTRICT)**—A student who resides outside the administrative unit (or school district). (V, VR)

**NONRESIDENT STUDENT OF ATTENDANCE AREA**—A student who resides outside the geographic area normally served by the school he attends. (V, VR) *See also* **SCHOOL ATTENDANCE AREA**.

**NONREVENUE RECEIPTS**—Amounts received which either incur an obligation that must be met at some future date or change the form of an asset from property to cash and therefore decrease the amount and value of school property. Money received from loans, sale of bonds, sale of property purchased from capital funds, and proceeds from insurance adjustments constitute most of the nonrevenue receipts. (I-II)

**NONSCHOOL ACTIVITIES**—Activities which are neither sponsored by the school nor under the guidance or supervision of staff members, but are considered significant in terms of permanent records about pupils. (V)

**NONSCHOOL EMPLOYMENT**—Employment which is not associated with a school system. (IV)

**NONSCHOOL PERFORMANCE INFORMATION**—Information about employment of the student and other activities performed outside the school, whether performed during school terms or during vacations (VR)

**NONSERVED CHILD**—A handicapped child of compulsory school attendance age who is not attending school because there is no program that meets his special educational need. (VR) *See also* EXEMPTED CHILD.

**NONSTANDARD ENGLISH**—*See* ENGLISH (SOCIO-CULTURAL DIALECT).

**NONTUITION STUDENT**—A student usually a resident of the geographic area served by a specified school, school system, or institution—for whom no tuition is paid. (V-VR)

**NORM**—(1) A standard of performance; (2) the level of achievement or performance of the modal group of a population. (Unpublished IX)

**NORM-REFERENCED TEST** An examination for which an individual's score indicates the relationship of the individual's performance to that of a specified norm group. (VR) *See also* CRITERION-REFERENCED TEST.

**NORMAL CAPACITY**—The number of pupils that can be accommodated in the instruction rooms of a given plant for the school day according to existing State standards, exclusive of multiple sessions. (I)

**NUMBER BELONGING**—*See* MEMBERSHIP.

**NUMBER OF LIBRARIAN/MEDIA ASSIGNMENTS PER 1,000 STUDENTS IN AVERAGE DAILY ATTENDANCE**—The number representing the total full-time equivalency of librarian/media assignments in a school system during a given period of time, multiplied by 1,000 and divided by the average daily attendance of students during this period. (VR)

**NUMBER OF LIBRARIAN/MEDIA ASSIGNMENTS PER 1,000 STUDENTS IN AVERAGE DAILY MEMBERSHIP**—The number representing the total full-time equivalency of librarian/media assignments in a school system during a given period of time, multiplied by 1,000 and divided by the average daily membership of students during this period. (VR)

**NUMBER OF MILES OF BUS TRAVEL**—The total number of miles traveled daily by all vehicles used in transporting pupils while loaded with one or more pupils. Included are the total number of recognized

miles traveled by passenger cars, station wagons, and other small vehicles. (Unpublished VIII)

**NUMBER OF STUDENTS ADVANCED AT AN ACCELERATED RATE**—The number of students whose progress is more rapid than the usual practice. This may involve "double promotions" (two grades' progress in one year) or some other arrangement for promoting students at a rate more rapid than one grade per year. (VR)

**NUMBER OF STUDENTS COMPLETING A GIVEN COURSE**—The number of students in a graduation group, including discontinuers or dropouts, who completed a given course during the years in a given school or school system. (VR)

**NUMBER OF STUDENTS TAKING A GIVEN COURSE**—The number of students who, during a given reporting period (e.g., a given regular school term) are enrolled in a given course. (VR)

**NUMBER OF STUDENTS TRANSPORTED TO AND FROM SCHOOL AT PUBLIC EXPENSE**—*See* AVERAGE DAILY MEMBERSHIP OF STUDENTS and AVERAGE NUMBER OF STUDENTS TRANSPORTED.

**NUMBER OF STUDENTS WHOSE FAMILIES FALL WITHIN THE U.S. DEPARTMENT OF AGRICULTURE'S INCOME POVERTY GUIDELINES**—The number of students whose applications have been approved by the school (within the prescribed limits of State-established income standards) for participating without charge or at a reduced charge in national school breakfast and/or Type A lunch programs. (VR)

**NURSE**—A staff member who is licensed to practice nursing, and who is providing nursing services within the school system. (IV)

**NURSE ASSIGNMENT**—An assignment to a staff member who is a qualified nurse to perform the activities of professional or practical nursing. (IV) *See also* REGISTERED NURSING ASSIGNMENT and PRACTICAL NURSING ASSIGNMENT.

**NURSE SERVICES**—Nursing activities which are not instruction, such as health inspection, treatment of minor injuries, and referrals for other health services. (IVR)

**NURSERY**—A beginning group or class that is organized to provide educational experiences for children during the year or years preceding kindergarten. A

nursery class may be organized as a grade of an elementary school or as a part of a separate nursery school. (IV, V) *See also* **ELEMENTARY SCHOOL; NURSERY SCHOOL;** and **PRE-SCHOOL PROGRAM.**

**NURSERY SCHOOL**—A separately organized and administered elementary school for groups of children during the year or years preceding kindergarten, which provides educational experiences under the direction of professionally qualified teachers. (I, II, III-V-VI, IIR, IVR)

**NURSERYMAN**—A staff member performing the assigned technical activities of caring for and propagating trees and shrubs for planting on school sites or school system owned farmland. (IV)

**NURSE-TEACHER**—A staff member performing assigned teaching activities requiring the technical education and training necessary to qualify the staff member as a nurse as well as a teacher. (IV) *See also* **TEACHING ASSIGNMENT.**

**NURSING** (subject matter—*See* appendix, p 185.

**NUTRITIONIST**—A staff member performing assigned technical activities in connection with determining nutritive value of food; measuring vitamin content of foods; measuring amount of proteins, carbohydrates, and minerals in foods; and computing caloric value of foods for diet charts. (IV) *See also* **DIETITIAN/NUTRITIONIST ASSIGNMENT.**

—O—

**OBJECT**—The commodity or service obtained from a specific expenditure. (VII, IIR, IVR)

**OBJECT** (State education agency)—The commodity or service obtained from a specific expenditure. This term also includes the following:

- (1) **Grants and subsidies**—this term does not represent a true object in the sense of denoting goods or services purchased. It is included here to allow for identifying those resources distributed to other agencies via the State education agency. This procedure prevents the distortion of the operating costs of the agency.
- (2) **Transfers**—This term does not represent a true object in the sense of denoting goods or services

purchased. It is included here to identify money taken from one fund of the agency and added to another fund of the agency. Such interfund transfers are neither receipts nor expenditures of the agency. (VII)

**OBJECT CLASSIFICATION**—A category of goods or services purchased. (II, IIR)

**OBLIGATIONS**—Amounts which the LEA will be required to meet out of its resources, including both liabilities and encumbrances. (II, VII, IIR)

**OBSOLESCENCE**—The decrease in the value of fixed assets due to curricular, program, economic, social, technical, or legal changes. (III)

**OCCUPATIONAL CLUSTER**—A grouping of occupations which possess a number of common features, such as types of equipment used, objectives, or processes, but not necessarily requiring total uniformity. (Unpublished IX)

**OCCUPATIONAL FIELD**—A group of recognized occupations having many similarities, including the following characteristics in common: the type of work performed; the basic aptitudes, and the acquired knowledge and training required; the tools, machines, instruments, and other equipment used; and the basic materials used. (VI)

**OCCUPATIONAL PROGRAM**—A secondary school, junior college, or adult/continuing education program of studies designed primarily to prepare student for immediate (i.e., job-entry level) employment or upgrading in an occupation or cluster of occupations. (V-IVR-VR) *See also* **JOB-ENTRY LEVEL OF EMPLOYMENT.**

**OCULIST**—*See* **OPHTHALMOLOGIST.**

**OFFICE/CLERICAL**—A grouping of assignments to perform the activities of preparing, transferring, transcribing, systematizing, or preserving communications, records, and transactions, regardless of the level of skills required, where the activities are predominantly nonmanual. (IIR, IVR)

**OFFICE OCCUPATIONS** (Subject matter)—*See* appendix, p. 230.

**OFFICE OF THE PRINCIPAL SERVICES**—Those



activities concerned with directing and managing the operation of a particular school. This data element includes the activities performed by the principal, assistant principals, and other assistants in general supervision of all operations of the school, evaluation of the staff members of the school, assignment of duties to staff members, supervision and maintenance of the school records, and coordination of school instructional activities with instructional activities of the LEA. Clerical staff for these activities are included here. (IVR)

**OFFICE OF THE SUPERINTENDENT SERVICES**—Activities performed by the superintendent and such assistants as deputy, associate, and assistant superintendents, in the general direction and management of all affairs of the LEA. This data element includes all personnel and materials in the office of the chief executive officer. (IVR)

**OFFICE PRACTICE** (subject matter)—See appendix, p. 159.

**OFFICE-RELATED TECHNOLOGY** (subject matter)—See appendix p. 251.

**OFFICE WORK EXPERIENCE** (subject matter)—See appendix p. 155.

**OFFICIAL**—The elected or appointed member of a board of education or governing body of an LEA. (IVR)

**OFFICIAL/ADMINISTRATIVE**—A grouping of assignments comprising the various skill levels required to perform management activities, such as developing broad policies for the LEA and executing these policies through direction of staff members at all levels of the LEA. Those activities performed directly for policy-makers are also included here. The "Official/Administrative" classification does not preclude "Professional-Educational" or "Professional-Other" status. (IIR, IVR)

**OMBUDSMAN ASSIGNMENT**—An assignment to receive and investigate complaints made by individuals against alleged abuses or capricious acts of administrative LEA officials. (The ombudsman usually works for the board of education in a quasi-official status. (IIR, IVR)

**ON-THE-JOB SUPERVISION**—Supervision of the work

portion of a course in a work-study program, at the pupil's place of employment, by a supervisor not employed by the school. (VI)

**ON-THE-JOB TRAINING**—A program of instruction provided to an employed worker by the employer during the normal working hours of the occupation (VI)

**ONE-TEACHER SCHOOL**—A school in which one teacher is employed to teach all grades authorized in the school, regardless of the number of rooms in the building. There are two classifications of one-teacher schools used in Handbook I: (a) those with four or less grades, and (b) those with five or more grades. During some years, there may be grades in which no pupils are enrolled. (I-VI)

**OPEN-ENDED PROGRAM**—A program of instruction at the postsecondary instructional level, of an occupational or terminal nature designed, often in cooperation with one or more 4-year colleges or universities, so that credits earned may be applicable, at least in part, toward the bachelor's degree. (V)

**OPERATION AND MAINTENANCE OF PLANT SERVICES**—Activities concerned with keeping the physical plant open, comfortable, and safe for use, and keeping the grounds, buildings, and equipment in an effective working condition and state of repair. Activities which maintain safety in buildings, on the grounds, and in the vicinity of schools would be included here. (I, II, III-IV-IVR)

**OPERATIONAL PERSONNEL**—Staff members who are assigned activities of keeping the physical plant open and ready for use. Included are personnel engaged in cleaning, disinfecting, heating, moving furniture, caring for grounds, operating telephone switchboard, and other such work except repairing, which is repeated somewhat regularly: daily, weekly, monthly, or seasonally. (I, II, III-IV)

**OPERATIONAL UNIT**—A separately budgeted subdivision of an LEA established to carry out a major objective or group of objectives, such as a school, the transportation unit, or the athletic department. (IIR, IVR)

**OPERATIONS SERVICES** (statistics)—Activities concerned with scheduling, maintaining, and producing data. These activities include operating business

machines and data processing machines. (IIR, IVR)

**OPERATIVE**—A grouping of manual assignments requiring an intermediate skill level (which can be mastered in a few weeks through limited training) necessary to perform machine operating activities. (IIR, IVR)

**OPHTHALMIC (subject matter)**—See appendix p. 187.

**OPHTHALMOLOGIST**—A staff member who is a licensed physician providing specialized services within the school system in the care of the eye and its related structures. (IV)

**OPHTHALMOLOGIST ASSIGNMENT**—An assignment to a staff member who is licensed as a physician and certified as an ophthalmologist to provide specialized services in the care of the eye and its related structures. (IIR, IVR)

**OPTOMETRIST**—A staff member who is a nonmedical practitioner licensed to treat optical and muscle defects of the eye without the use of drugs or surgery, and who is providing such services within the school system. (IV)

**OPTOMETRIST ASSIGNMENT**—An assignment to a staff member who is a licensed optometrist to treat optical and muscle defects of the eye without the use of drugs or surgery. (IVR)

**ORDERED PROFILE**—A graphic (or line) diagram sequentially showing the relative position of a person or group on each of several measures. (Unpublished IX)

**ORGANIZATIONAL UNIT**—An organizational subdivision within a State education agency established for the purpose of carrying out designated functions or activities. (VII)

**ORIGINAL COST**—Costs involved in purchasing an item of property. (III)

**ORIGINAL ENTRY**—A student who for the first time in the United States or its outlying areas enters any public or nonpublic elementary or secondary school. (I-V, VR)

**ORNAMENTAL HORTICULTURE (PRODUCTION, PROCESSING, MARKETING, AND SERVICES)** (subject matter)—See appendix, p. 145.

**ORTHOPEDICALLY HANDICAPPED (CRIPPLED)**—Individuals with an orthopedic condition of a type which might restrict normal opportunity for education or self-support. This term is generally considered to include individuals having impairments caused by congenital anomaly (e.g., clubfoot, absence of some member, etc.), impairments caused by disease (e.g., poliomyelitis, bone tuberculosis, cerebral palsy, etc.), and impairments caused by accident (e.g., fractures or burns which cause contractures, etc.). (V-VR)

**OTHER SECOND-LEVEL DEGREE OR ADVANCED CERTIFICATE**—A degree (e.g., Educational Specialist Degree), above the master's degree level but below the level of a doctor's degree. Such recognition of completed graduate work as certificate of advanced graduate study above the master's degree level but below the doctor's degree level is included here. (IV)

**OUTDOOR EDUCATION**—A means of curriculum enrichment that is experienced in and through the outdoors. In achieving this means of enrichment, instruction is adapted largely to the utilization of resources and activities unique or more appropriate to the outdoor setting, where pupils, instructors, and others may stay for several days. (VI)

**OUTDOOR SERVICE SYSTEM**—Improvements to site designed to facilitate or provide such services as movement of vehicular and pedestrian traffic, vehicular parking, artificial lighting, water supply, sewage disposal, and storage. (III) See also **IMPROVEMENT TO SITE**.

**OUTLYING AREAS**—A term including American Samoa, the Canal Zone, Guam, Puerto Rico, the Trust Territory of the Pacific Islands, the Virgin Islands, and other areas under jurisdiction or control of the United States. (V-VR)

**OUT-OF-SCHOOL YOUTH**—Persons under 21 years of age, excluding children below school age, who (a) are not elementary or secondary school pupils and (b) are not taking courses for college credit toward degrees or equivalent certificates. A pupil is not considered to be an out-of-school youth when he is not attending school during a vacation period. (Now considered obsolete.) (IV, V)

**OVER COMPULSORY AGE**—The youth has passed the compulsory school attendance age. This information is maintained where required by law or regulation for census or school purposes. (V-VR)

**OVERAGE**—See OVER COMPULSORY AGE.

**OVERHEAD COSTS**—Those elements of cost necessary in the production of an article or the performance of a service which are of a nature that the amount applicable to the product or service cannot be determined accurately or readily. Usually they relate to those objects of expenditures which do not become an integral part of the finished product or service, such as rent, heat, light, supplies, management, supervision, and other similar-items. (IIR, IVR)

**OVERTIME SALARIES**—Gross salary paid to employees of the LEA in positions of either a temporary or permanent nature for work performed in addition to the normal work period for which the employee is compensated under Regular Salaries and Temporary Salaries. The terms of such payment for overtime is a matter of State and local regulation and interpretation. (IIR)

—P—

**PAINTING ASSIGNMENT**—An assignment to perform activities involved with painting, varnishing, and staining the interior and exterior of buildings and fixtures. (IIR, IVR)

**PARAPROFESSIONAL**—A staff member who works along side a professional staff member and assists him but who does not have full professional status, e.g., teacher's aide. (VII) See also TECHNICAL.

**PART-TIME GENERAL CONTINUATION CLASS**—In vocational education, a class for persons under 18 who have terminated their full-time education in elementary or secondary school to enter upon employment. Such a class is designed to increase civic intelligence rather than to develop specific occupational competence and is conducted during what would be the usual working hours of the enrollees. (VI)

**PART-TIME PERSONNEL**—Personnel who occupy positions which require less than full-time service. This includes those employed full-time for part of the school year, part-time for all of the school year, and part-time for part of the school year. (I, II, IIR, IVR) See also FULL-TIME PERSONNEL.

**PART-TIME STAFF MEMBER**—A staff member whose total current assignments require less than his

full-time services. A part-time staff member may be employed full-time for part of the year or part-time for part or all of the year. (IV, VII, IVR)

**PART-TIME STUDENT**—A student who is carrying less than a full course load, as determined by the State, local school system, or institution. (V, VI, IIR, IVR-VR)

**PARTIAL TUITION STUDENT**—A student for whom tuition is paid, but less than the maximum amount. (V, VR)

**PARTIALLY SEEING**—Individuals who have severely impaired vision but have sufficient residual vision (with correction) to include the perception of printed materials as a means of learning. (VR)

**PAYMENTS IN LIEU OF TAXES**—Payments made out of general revenues by a governmental unit to the LEA in lieu of taxes it would have had to pay had its property or other tax base been subject to taxation by the local LEA on the same basis as other privately owned property or other tax base. It would include payment made for privately-owned property which is not subject to taxation on the same basis as other privately-owned property due to action by the governmental unit. (IIR)

**PAYROLL**—A list of individual employees entitled to pay, with the amounts due to each for personal services rendered. Payments are also made for such payroll-associated costs as Federal income tax withholdings, retirement and Social Security. (II-IIB-IIR)

**PAYROLL DEDUCTION AND WITHHOLDING**—Amounts deducted from employees' salaries for taxes required to be withheld and for other withholding purposes. Separate liability accounts may be used for each type of deduction. (IIR)

**PAYROLL SERVICES**—Activities concerned with making periodic payments to individuals entitled to remuneration for services rendered. Payments are also made for such payroll-associated costs as Federal income tax withholding, retirement, and Social Security. (IVR)

**PENALTIES AND INTEREST ON TAXES**—Amount collected as penalties for the payment of taxes after the due date or dates, and the interest charged on

delinquent taxes from the due date to the date of actual payment. A separate account for penalties and interest on each type of tax may be maintained. (IIR)

**PENSION SYSTEM**—A free retirement plan whereby persons leaving service in the educational system because of age, disability, or length of service receive payments from funds to which they have not contributed. Payments may be either in a lump sum or in the form of annuity. (I, II, IIR, IVR) *See also* **RETIREMENT FUND SYSTEM.**

**PER DIEM**—By the day, usually used in relation to payment of subsistence expenses or fees. (VII)

**PER PUPIL COST**—*See* **ANNUAL CURRENT EXPENDITURES PER STUDENT IN ADA, ANNUAL CURRENT EXPENDITURES PER STUDENT IN ADM; CURRENT EXPENDITURES PER STUDENT; CURRENT EXPENDITURES PER STUDENT PER DAY (ADA); and CURRENT EXPENDITURES PER STUDENT PER DAY (ADM).**

**PER SQUARE FOOT COST OF BUILDING**—The total cost of the building divided by the gross area of the building. (III)

**PER STUDENT COST OF A BUILDING**—The cost of a building divided by the student capacity of the building. (III, V, VR)

**PERCENTAGE IN MEMBERSHIP**—*See* **PERCENTAGE OF AGE GROUP IN ALL SCHOOLS and PERCENTAGE OF AGE GROUP IN PUBLIC SCHOOLS.**

**PERCENTAGE OF ABSENCE**—The average daily absence during a given reporting period divided by the average daily membership for the period, expressed as a percentage, or, the aggregate days absence divided by the aggregate days membership, expressed as a percentage. (V, VR)

**PERCENTAGE OF AGE GROUP IN ALL SCHOOLS**—The number of resident pupils of a given age group (e.g., 14 to 18 years of age) entered in all public and nonpublic schools, divided by the total number of residents within the age group, expressed as a percentage. (V)

**PERCENTAGE OF AGE GROUP IN PUBLIC SCHOOLS**—The number of resident pupils of a given

age group (e.g., 14 to 18 years of age) entered in public schools, divided by the total number of residents within the age group, expressed as a percentage. (V)

**PERCENTAGE OF ATTENDANCE**—The average daily attendance during a given reporting period divided by the average daily membership for the period, expressed as a percentage; or, the aggregate days attendance divided by the aggregate days membership, expressed as a percentage. (V, VI, VR)

**PERCENTAGE OF CHANGE IN MEMBERSHIP FROM PREVIOUS YEAR (FOR A GIVEN DATE)**—The change of membership from a given date in one year to a corresponding date the following year, divided by the membership as of the first date, expressed as a percentage. (V, VR)

**PERCENTAGE OF CHANGE IN MEMBERSHIP FROM PREVIOUS YEAR (FOR A PERIOD OF TIME)**—The change of average daily membership from a given period of time in one year to a corresponding period of time the following year, divided by the average daily membership during the first period of time, expressed as a percentage. (V, VR)

**PERCENTAGE OF EXCEPTIONAL CHILDREN IN SPECIAL CLASSES OR SCHOOLS**—The number of resident exceptional children entered in special classes or schools, divided by the total number of resident children identified as exceptional, expressed as a percentage. (V, VI)

**PERCENTAGE OF HIGH SCHOOL GRADUATES WHO COMPLETED COURSES IN VARIOUS SUBJECT-MATTER AREAS**—The number of students in a given high school graduation group who completed courses in each of a number of specific subject-matter areas, divided by the total number of students in the group, expressed as a percentage. (V-VI, VR)

**PERCENTAGE OF PARTICIPATION IN NATIONAL SCHOOL BREAKFAST PROGRAM**—The average daily number of elementary and/or secondary school students participating in the national school breakfast program during a specified month, divided by the average daily attendance for the same month. (VR) *See also* **AVERAGE DAILY NUMBER OF STUDENTS PARTICIPATING IN NATIONAL SCHOOL LUNCH AND/OR BREAKFAST PROGRAMS.**

**PERCENTAGE OF PARTICIPATION IN NATIONAL SCHOOL LUNCH PROGRAM**—The average daily number of students participating in the national school lunch program during a specified month, divided by the average daily attendance for the same month. (VR)  
*See also* AVERAGE DAILY NUMBER OF STUDENTS PARTICIPATING IN NATIONAL SCHOOL LUNCH AND/OR BREAKFAST PROGRAMS.

**PERCENTAGE OF PUPILS IN NONPUBLIC SCHOOLS**—The number of pupils of a given age group or type of instructional organization entered in nonpublic schools, divided by the total number of pupils in this age group or type of instructional organization entered in all schools, expressed as a percentage. (V, VI)

**PERCENTAGE OF PUPILS WITHDRAWING, BY TYPE OF WITHDRAWAL**—The number of pupils withdrawing from school during a given regular school term in each of the four principal categories of withdrawal (i.e., transfer, completion of school work, dropout, and death), divided by the total number of pupils withdrawing, expressed as a percentage. (V)

**PERCENTAGE OF SCHOOL-AGE POPULATION IN PUBLIC (OR NONPUBLIC) ELEMENTARY AND SECONDARY SCHOOLS**—The number of resident pupils of compulsory school attendance age entered in public (or nonpublic) elementary and secondary schools, divided by the total number of residents of compulsory school attendance age, expressed as a percentage. (V)

**PERCENTAGE OF STUDENTS CURRENTLY MEMBERS OF CLASSES IN VARIOUS SUBJECT-MATTER AREAS**—The number of students in a given school group who are members of classes in each of a number of specific subject-matter areas, divided by the total number of students in the group, expressed as a percentage. (V-VI-VR)

**PERCENTAGE OF STUDENTS MAKING NORMAL PROGRESS**—The number of students making normal progress during a given reporting period, divided by the membership at the close of the period, expressed as a percentage. (V, VI, VR)

**PERCENTAGE OF STUDENTS NOT PROMOTED (OR, RETAINED)**—The number of students who, at the close of a given reporting period (usually a regular school term), are reassigned to the same grade, divided by the membership at the close of the period,

expressed as a percentage. Students in ungraded classes are not considered "not promoted" unless (and until) they are asked to spend more than the usual amount of time in such classes. (V, VI, VR)

**PERCENTAGE OF STUDENTS PARTICIPATING IN VARIOUS ACTIVITIES**—The number of students who, during a given reporting period (e.g., a given regular school term), take part in each of a number of specific activities, divided by the average daily membership of students in the group, expressed as a percentage. (V, VI, VR)

**PERCENTAGE OF STUDENTS PROMOTED**—The number of students promoted during or at the close of a given reporting period (usually a regular school term), divided by the membership at the close of the period, expressed as a percentage. For reporting purposes, students in ungraded classes who have made satisfactory progress may be considered separately or they may be considered promoted. (V, VI, VR)

**PERCENTAGE OF STUDENTS TRANSPORTED AT PUBLIC EXPENSE**—The average daily membership of students transported at public expense, divided by the average daily membership of the reporting unit, expressed as a percentage. (V, VR)

**PERCENTAGE OF TIME IN ATTENDANCE (for an individual)**—The number of days of attendance divided by the number of days of membership, expressed as a percentage. (VR)

**PERCENTAGE OF TIME IN MEMBERSHIP (for an individual)**—The number of days in membership divided by the total number of days school was legally in session during a given reporting period, expressed as a percentage. (VR)

**PERCENTAGE OF TOTAL EXCESS PUBLIC SCHOOL MEMBERSHIP**—Total excess membership in public schools divided by the normal student capacity of accessible publicly-owned school plants in use, expressed as a percentage. (V, VI, VR) *See also* EXCESS MEMBERSHIP IN PUBLIC SCHOOLS and STUDENT CAPACITY OF A SCHOOL PLANT.

**PERCENTAGE OF TOTAL MEMBERSHIP BEING PROVIDED APPROPRIATE SPECIAL EDUCATION**—The number of pupils who have been identified as exceptional by professionally qualified personnel and who are being provided appropriate special

education, divided by the total membership, expressed as a percentage. These pupils may be considered also in smaller groups according to type of exceptionality, e.g., blind, deaf, mentally retarded, etc. (V, VI)

**PERCENTAGE OF TRANSPORTED PUPILS RIDING**

**A GIVEN DISTANCE**—The average daily membership of pupils who ride a given distance (e.g., 5, 10, 15, and 20 miles), divided by the average daily membership of pupils transported, expressed as a percentage. This percentage may be determined as of a given date or on the basis of averages for a given reporting period. (V)

**PERCENTAGE OF TRANSPORTED STUDENTS**

**RIDING A GIVEN TIME**—The average daily membership of students who ride a given time (e.g., 30 minutes, and 1, 1-1/2, and 2 hours), divided by the average daily membership of students transported, expressed as a percentage. This percentage may be determined as of a given date or on the basis of averages for a given reporting period. (V, VR)

**PERCEPTUAL SKILLS** (subject matter)—See appendix, p. 270.

**PERIODICAL**—Any publication appearing at regular intervals of less than a year and continuing for an indefinite period. (III, IIR)

**PERMANENT ADDRESS** (staff)—The place which the staff member considers to be his permanent place of residence. The permanent address of the staff member may or may not be the same as the current address. (IV)

**PERMANENT BUILDING**—A building designed for its site or placed upon its site and not intended to be moved. (III, VI-VII)

**PERMANENT SCHOOL FUND**—Money, securities, or land, which have been set aside as an investment for public school purposes of which the income but not the principal may be expended. These funds have been derived, in most cases, from the sale of State land set aside by the Federal and/or State Government, rents and royalties, and from surplus revenue returned to the State by the Federal Government. In some instances, there may be endowment funds for individual schools. There may be nonexistent funds, also, which are legally recognized as an obligation. (I, II-IIR) See also **ENDOWMENT FUND**.

**PERMANENT STUDENT RECORD**—A student record considered to have permanent or semipermanent value and which remains indefinitely in the files of the school or school system. (V, VR) See also **STUDENT RECORD** and **CUMULATIVE STUDENT RECORD**.

**PERSONAL DEVELOPMENT AND HUMAN RELATIONS** (subject matter)—See appendix, p. 159.

**PERSONAL FINANCE** (subject matter)—See appendix, p. 159.

**PERSONAL IDENTIFICATION INFORMATION** (staff)—Any record items which are so closely related with the staff member as an individual that used collectively they distinguish the staff member from other individuals. (IV)

**PERSONAL LEAVE**—Leave, usually without pay, permitted staff members for personal reasons. (IV, IVR)

**PERSONAL SERVICES** (subject matter)—See appendix, p. 165.

**PERSONNEL** (local education agency)—Employees of an LEA or any persons under the supervision of the LEA who are eligible for workmen's compensation, Federal Insurance Contribution Act, and wage or salary tax withholdings. Included are persons who volunteer their services. (IVR)

**PERSONNEL** (State education agency)—Either employees of the State department of education or members of a State board of education. (VII)

**PERSONNEL, ADMINISTRATIVE**—See **ADMINISTRATIVE PERSONNEL**.

**PERSONNEL, ATTENDANCE**—See **ATTENDANCE PERSONNEL**.

**PERSONNEL, CLERICAL**—See **CLERICAL PERSONNEL**.

**PERSONNEL, FULL-TIME**—See **FULL-TIME PERSONNEL**.

**PERSONNEL, GUIDANCE**—See **GUIDANCE PERSONNEL**.

**PERSONNEL, HEALTH**—See **HEALTH PERSONNEL**.

**PERSONNEL, INSTRUCTIONAL**—See **INSTRUCTIONAL PERSONNEL**.

**PERSONNEL, MAINTENANCE**—See **MAINTENANCE PERSONNEL**.

**PERSONNEL, NONPROFESSIONAL**—See **NONPROFESSIONAL PERSONNEL**.

**PERSONNEL, OPERATIONAL**—See **OPERATIONAL PERSONNEL**.

**PERSONNEL, PART-TIME**—See **PART-TIME PERSONNEL**.

**PERSONNEL, PSYCHOLOGICAL**—See **PSYCHOLOGICAL PERSONNEL**.

**PERSONNEL, RECREATIONAL**—See **RECREATIONAL PERSONNEL**.

**PERSONNEL, SOCIAL WORK**—See **SOCIAL WORK PERSONNEL**.

**PERSONNEL, TECHNICAL**—See **TECHNICAL PERSONNEL**.

**PERSONNEL ASSIGNMENT**—An assignment to perform activities concerned with staff recruitment, selection, assignment, promotion, and training, maintaining staff records, and working with administrators in developing pension and insurance plans. (IIR, IVR)

**PETROLEUM** (subject matter)—See appendix, p 165

**PETTY CASH**—A sum of money set aside for the purpose of paying small obligations for which the issuance of a formal voucher and check would be too expensive and time consuming. Also, a sum of money, either, in the form of currency or a special bank deposit, set aside for the purpose of making change or immediate payment of comparatively small amount. (II, IIB, VII-IIR) See also **IMPREST SYSTEM**.

**PHILOSOPHY** (subject matter)—See appendix, p. 243.

**PHONETICS** (subject matter)—See appendix, p. 174.

**PHYSICAL AND MENTAL HEALTH SERVICES RESPONSIBILITY**—The area of responsibility for providing medical and psychiatric services which are not direct instruction. (IV)

**PHYSICAL EDUCATION** (subject matter)—See appendix, p. 193.

**PHYSICAL HANDICAP**—An atypical physical condition that adversely affects the performance of an individual. Individuals with marked physical handicaps may be classified into groups such as, the blind, the partially seeing, the deaf, the hard of hearing, the speech handicapped, the language handicapped, the crippled, and those having special physical health problems resulting from various diseases and conditions. (V, VI, VR) See also **HANDICAPPED CHILDREN**.

**PHYSICAL IMPAIRMENT**—A physical condition that may adversely affect a student's normal progress in the usual school program. (V-VR) See also **PHYSICAL HANDICAP**.

**PHYSICAL LIMITATION**—A physical handicap or other physical condition (e.g., a heart condition, diabetes, or sight defect) which limits the performance of the staff member in some activities and must be considered in assignments. (IV)

**PHYSICAL SCIENCES (INCLUDING GENERAL PHYSICAL SCIENCE)** (subject matter)—See appendix, p. 226.

**PHYSICAL THERAPIST**—A staff member performing assigned technical activities for the purpose of restoring to optimum use damaged or atrophied muscles. (IV)

**PHYSICALLY HANDICAPPED**—Pupils identified by professionally qualified personnel as having one or more physical handicaps, e.g., the blind, the hard of hearing, the speech impaired, and the crippled. (V-VI)

**PHYSICIAN**—A staff member who is licensed to practice the art and science of medicine, and who is providing medical services within the school system. (IV)

**PHYSICIAN ASSIGNMENT**—An assignment to a staff member who is licensed as a medical doctor to diagnose and treat diseases and disorders of the human body. (IV-IJR, IVR)

**PLACE**—Concentration of population, regardless of the existence of legally prescribed limits, powers, or functions. (Unpublished VIII)

**PLACE OF BIRTH**—The local governmental unit (e.g., city, county, township) and State, U.S. possession, or foreign country in which the staff member was born. (IV)

**PLACEMENT SERVICES**—Activities organized (1) to help place pupils in appropriate educational situations and/or in appropriate part-time employment while they are in school, and in appropriate educational and occupational situations after they leave school; and (2) to help pupils in making the transition from one educational experience to another. The latter may include, for example, admissions counseling, referral services, assistance with records, and follow-up communications with employers. (IVR)

**PLANNING**—The selection or identification of the overall, long-range goals, priorities, and objectives of the organization, and the formulation of various courses of action to be followed in working toward achieving those goals, priorities, and objectives. (VII, IIR, IVR)

**PLANNING ASSIGNMENT**—An assignment to perform activities concerned with selecting or identifying the goals, priorities, and objectives of the LEA and formulating the courses of action to fulfill these objectives. (IIR, IVR)

**PLANNING PERIOD**—That period of time for which active planning is being done. Short term is usually less than five years and long term any period over five years. (Unpublished VIII)

**PLANNING-PROGRAMING-BUDGETING-EVALUATION SYSTEM (PPBES)**—A structured procedure for determining policy in the allocation of resources for accomplishment of priority programs, it emphasizes long-range planning, analytic evaluative tools, and economic rationality in setting goals and objectives and in the determination of programs. (VII, IIR, IVR)

**PLANNING, RESEARCH, DEVELOPMENT, AND EVALUATION SERVICES**—Activities, on a system-wide basis, associated with conducting and managing programs of planning, research, development, and evaluation for a local education agency. (IVR)

**PLANNING SERVICES**—Activities concerned with (1) the selection or identification of the overall, long-range goals, priorities, and objectives of an organization or program; and (2) the formulation of various courses of

action in terms of identification of needs and relative costs and benefits. Included are decisions on courses of action to be followed in striving to achieve those goals, priorities, and objectives. (IVR)

**PLANT ENGINEER**—A staff member performing the assigned activities of supervising the operational staff of individual buildings or plants. (IV)

**PLANT SUPERVISION RESPONSIBILITY**—The area of responsibility for supervising plant operational staff servicing individual buildings or plants when such supervision is restricted to particular plants or buildings. It consists of such activities as overseeing the work of other staff members assigned to housekeeping duties, and providing guidance, direction, and leadership to improve the services of custodial workers. (IV)

**PLASTERING ASSIGNMENT**—An assignment to perform activities involved with applying and repairing plaster in the interior and on the exterior of buildings. (IIR, IVR)

**PLASTICS (subject matter)**—See appendix, p. 204.

**PLASTICS OCCUPATIONS (subject matter)**—See appendix, p. 263.

**PLAT BOOK**—A book of maps showing land owned by the school district. (III)

**PLAYGROUND BUILDING**—A community services building used primarily in conjunction with a community playground, such as buildings housing playground equipment, restroom and shower buildings, and shelters used during inclement weather. (III)

**PLUMBING ASSIGNMENT**—An assignment to perform activities involving assembling, installing, and repairing pipes, fittings, and fixtures of heating, water, and drainage systems. (IIR, IVR)

**POLICY**—A governing principle, plan, or guide for a course of action. (VII)

**POLICY DEVELOPMENT**—The formulation of governing principles, plans, or guides for courses of action. (VII)

**POLITICAL JURISDICTION**—A governmental administrative jurisdiction such as a county, town, township, or metropolitan district which serves as the



territorial basis for political representation. (Unpublished VIII)

**POLITICAL SCIENCE** (subject matter) See appendix, p. 243.

**POPULATION DENSITY MAP**—A map showing population densities per unit area (number of people per square mile or per acre). (Unpublished VIII)

**POPULATION DISTRIBUTION MAP**—A map showing the distribution of population by selected symbols, e.g., a dot represents ten people. (Unpublished VIII)

**PORTABLE BUILDING**—A building designed and constructed so that it can be transported to another location without disassembling. (III, VI-VII)

**POSTING**—The act of transferring to an account in a ledger the detailed or summarized data contained in the cash receipts book, check register, journal voucher, or similar books or documents of original entry. (II, III-IIB-IIR)

**POSTSCHOOL PERFORMANCE INFORMATION**—Information about aspirations and plans of the student for postschool vocation, training, and education. Also included is information about employment and other activities of the former student after leaving the school. (VR)

**POSTSECONDARY EDUCATION**—Instructional programs (including curriculum, instruction, and related student services) provided for persons who have completed or otherwise left educational programs in elementary and secondary school. (VR)

**POSTSECONDARY INSTRUCTIONAL LEVEL**—The general level of instruction provided for pupils in college programs, usually beginning with grade 13, and any instruction of a comparable nature and difficulty provided for adults and youth beyond the age of compulsory school attendance. (IV, V-VI)

**POWER/AUTOMOTIVE MECHANICS** (subject matter)—See appendix, p. 204.

**PRACTICAL NURSING ASSIGNMENT**—An assignment to perform auxiliary medical services, such as taking and recording temperature, pulse, and respiration rates and giving medication under the supervision of a physician or a registered nurse. (IIR, IVR)

**PRECINCT**—An election district of a town, township, county, or other political jurisdiction. (Unpublished VIII)

**PREKINDERGARTEN CLASS**—A group or class organized to provide educational experiences, for children during the year or years preceding the kindergarten, which are a part of the elementary school program and are under the direction of a professionally qualified teacher. A prekindergarten class may be organized as a grade of an elementary school or as a part of a separate nursery school. (VI)

**PREMIUM ON BONDS SOLD**—That portion of the sales price of bonds in excess of their par value. The premium represents an adjustment of the interest rate. (IIR)

**PREPAID EXPENSES**—Expenses entered in the accounts for benefits not yet received. Prepaid expenses differ from deferred charges in that they are spread over a shorter period of time than deferred charges and are regularly recurring costs of operation. Examples of prepaid expenses are prepaid rent, prepaid interest, and unexpired insurance premiums. An example of a deferred charge is unamortized discounts on bonds sold. (II-IIB-IIR)

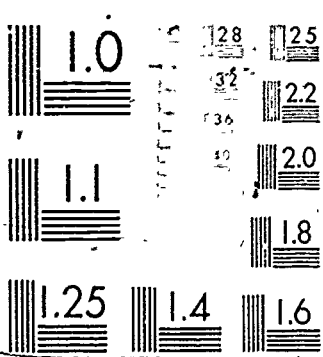
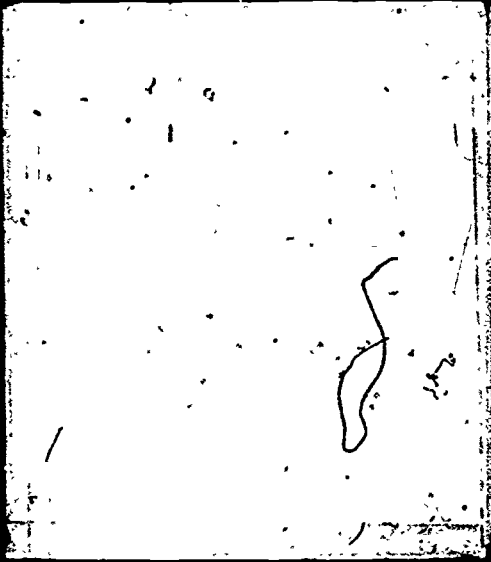
**PREPARATORY, POSTSECONDARY EDUCATION PROGRAMS**—Learning experiences concerned with the knowledge, skills, appreciations, attitudes, and behavioral characteristics which are considered to be needed by those pupils desiring postsecondary education programs and which normally may be achieved during the secondary school years. (IVR)

**PREPARATORY, POSTSECONDARY EMPLOYMENT PROGRAMS**—Learning experiences concerned with the knowledge, skills, appreciations, attitudes, and behavioral characteristics which are considered to be needed by those pupils desiring immediate post secondary employment and which normally may be achieved during the secondary school years. (IVR)

**PREPRIMARY LEVEL**—A distinct organization for classes within an elementary school for groups of children during the year or years preceding the primary level. (VI)

**PREPRIMARY SCHOOL**—A separately organized and administered elementary school for pupils in the year or years preceding the first grade. This may include pupils in the prekindergarten and kindergarten years or grades. (VI, IVR)

**PPEREQUISITE**—A course (completed successfully)



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or other requirement which is necessary as a preliminary to participation in a given activity or succeeding course. (VI)

**PRESCHOOL PROGRAM**—A beginning group or class enrolling children younger than 5 years of age and organized to provide educational experience under professionally qualified teachers in cooperation with parents during the year or years immediately preceding kindergarten (or prior to entry into elementary school when there is no kindergarten). (VR)

**PRESENT**—Available to perform assigned duties during the hours of the day when such duties are to be performed. (IV)

**PRESENT WORTH**—Current replacement cost of a piece of property less the deduction for depreciation. (III, VII)

**PRESENT WORTH OF A BUILDING**—Current replacement cost less the deductions for depreciation. (III) *See also* **INSURABLE VALUE OF A BUILDING** and **REPLACEMENT COST OF A BUILDING**.

**PRESENT WORTH OF A SITE**—The replacement cost less deductions for depreciation of improvements to the site. (III) *See also* **REPLACEMENT COST OF A SITE**.

**PRESENT WORTH OF EQUIPMENT**—Current replacement cost less deductions for depreciation. (III) *See also* **INSURABLE VALUE OF EQUIPMENT** and **REPLACEMENT COST OF EQUIPMENT**.

**PRESSURE GROUP**—Any group that attempts to influence legislative or governing agencies in behalf of its own special interests or the interests of a larger public that it represents. (Unpublished VIII)

**PREVOCATIONAL EDUCATION**—Orientation—to a number of different occupational areas—and counseling designed to assist a person in determining the occupational area(s) for which he might best prepare. (VI)

**PRIMARY ECONOMIC ACTIVITY**—An activity related to the original production of a commodity. Includes the products of agriculture, pastoralism, mining, fisheries, and forestry. (Unpublished VIII)

**PRIMARY GRADES**—The elementary grades preceding the intermediate grades, usually grades 1, 2, and 3. (IV V, VI, VII)

**PRIMARY LEVEL**—A distinct organization within an elementary school for pupils in the primary grades or years, usually grade 1 through grade 3 or the equivalent. In some instances, the preprimary and primary levels are combined. (VI)

**PRIMARY SCHOOL**—A separately organized and administered elementary school for pupils at the primary level, usually including grade 1 through grade 3 or the equivalent, and sometimes including preprimary years. (VI-IVR)

**PRINCIPAL**—A staff member performing the assigned activities of the administrative head of a school (not school district) to whom has been delegated major responsibility for the coordination and direction of the activities of the school. (I, II, III, IV) *See also* **SCHOOL DIRECTION AND MANAGEMENT ASSIGNMENT**.

**PRINCIPAL ASSIGNMENT**—An assignment to a staff member to perform highest level executive management functions in an individual school, group of schools, or unit(s) of an LEA. (IIR, IVR)

**PRINCIPAL OF BONDS**—The face value of bonds. (II, IIR) *See also* **FACE VALUE**.

**PRINCIPAL'S OFFICE**—A room or rooms, designed, or adapted, for the use of the principal and/or assistant principals in the discharge of their administrative responsibilities, including areas for secretarial and clerical assistants. (III) *See also* **PRINCIPAL OF A SCHOOL**.

**PRINCIPLE**—A comprehensive generalization describing some fundamental process, constant mode of behavior, or property relating to natural phenomena. (VI)

**PRINTER**—A staff member performing the assigned skilled activities of hand and machine setting of type, assembling type and cuts in chases, other skilled activities in connection with preparation for actual printing, and the actual printing of publications and other materials. (IV)

**PRINTING AND BINDING (finance)**—Amounts paid for job printing and binding, usually following the specifications of the LEA. This includes the design and printing of forms and posters as well as printing and binding LEA publications. Preprinted standard forms

purchased are not charged here, but are recorded under Supplies and Materials. (IIR).

**PRINTING, PUBLISHING, AND DUPLICATING SERVICES**—Activities of printing and publishing administrative publications such as annual reports, school directory, and manuals. This data element also includes providing centralized services for duplicating school materials and instruments such as school bulletins, newsletters, and notices. (IIR, IVR)

**PRIOR NONSCHOOL EMPLOYMENT**—Nonschool employment before entering into employment with the school system in which currently employed. (IV)

**PRIVATE OR NONPUBLIC SCHOOL**—A school which is controlled by an individual or by an agency other than a State, a subdivision of a State, or the Federal government, usually which is supported primarily by other than public funds, and the operation of whose program rests with other than publicly elected or appointed officials. (I, II-IV, V-VI-IIR, IVR-VR) See also **INDEPENDENT NONPROFIT SCHOOL** and **PROPRIETARY SCHOOL**.

**PRIVATELY-OWNED VEHICLE**—A vehicle owned by the contractor, a vehicle partially owned by the contractor (for instance, the contractor may own the chassis and the school own the body), or a car used by a parent who is paid from public funds to transport his own children and sometimes other children to schools. (I, II, III, IIR)

**PROBABILITY AND STATISTICS** (subject matter)—See appendix, p. 221.

**PROBATIONARY PROMOTION**—An arrangement whereby a pupil is promoted to the next higher grade on a trial basis in order that his progress and adjustment might be observed; if these prove satisfactory, the pupil is retained in the higher grade. (VI)

**PROBATIONARY STATUS**—The employment status of the staff member who is employed from year to year (subject to discontinuance of employment upon action by the governing board) preliminary to being placed on tenure status upon satisfactory performance over a stipulated period of time. (IV)

**PROBATIONARY STUDENT**—In community/junior colleges, a temporary status for all entering students having less than a stated academic achievement in their

high school graduating class, or who achieve less than a stated score on a standardized test. (VR)

**PROFESSIONAL**—A term denoting a level of knowledge and skills, possessed by an individual or required of an individual to perform an assignment, which is attained through extensive education and training, usually a minimum of a baccalaureate degree (or its equivalent obtained through special study and/or experience). (VII-IIR-IVR)

**PROFESSIONAL AND TECHNICAL SERVICES**—Services of individuals having extensive training in a particular line of work. This includes such services as those provided by architects, auditors, dentists and doctors, consultants, lawyers, tax collectors, data-processing service, bureaus, and others. (IIR, IVR)

**PROFESSIONAL EDUCATION COURSES**—Courses (e.g., educational psychology, curriculum, methods, student teaching, and history and principles of education) which are recognized by State certification laws and regulations as courses which distinguish professional education from other professions and occupations. (IV)

**PROFESSIONAL-EDUCATIONAL (staff)**—A grouping of assignments requiring a high degree of knowledge and skills acquired through at least a baccalaureate degree (or its equivalent obtained through special study and/or experience), including skills in the field of education or educational psychology. (IV, V-IIR, IVR)

**PROFESSIONAL EDUCATIONAL STAFF PER 1,000 STUDENTS IN AVERAGE DAILY MEMBERSHIP**—The number representing the total full-time equivalency of professional educational assignments in a school system during a given period of time, multiplied by 1,000 and divided by the average daily membership of students during this period. (IV, V, VI, VR)

**PROFESSIONAL LEAVE**—Leave granted to employees, generally with all or part of their salary paid, for the purpose of professional improvement. (VII)

**PROFESSIONAL-OTHER (staff)**—A grouping of assignments requiring a high degree of knowledge and skills acquired through at least a baccalaureate degree (or its equivalent obtained through special study and/or experience), but not requiring skills in the field of education. (IV, V-IIR, IVR)

PROGRAM—A plan of activities and procedures designed to accomplish a predetermined objective or set of allied objectives. (IIR, IVR)

PROGRAM, ADULT/CONTINUING EDUCATION—*See* ADULT/CONTINUING EDUCATION PROGRAM.

PROGRAM, ADULT EDUCATION—*See* ADULT EDUCATION PROGRAM.

PROGRAM, APPRENTICESHIP—*See* APPRENTICESHIP PROGRAM.

PROGRAM, BASAL READER—*See* BASAL READER PROGRAM.

PROGRAM, DEVELOPMENTAL READING—*See* DEVELOPMENTAL READING PROGRAM.

PROGRAM, ENRICHMENT—*See* ENRICHMENT PROGRAM.

PROGRAM, FOUNDATION—*See* FOUNDATION PROGRAM.

PROGRAM, GENERAL EDUCATION—*See* GENERAL EDUCATION PROGRAM.

PROGRAM, HEAD START—*See* HEAD START PROGRAM.

PROGRAM, HONORS—*See* HONORS PROGRAM.

PROGRAM, OCCUPATIONAL—*See* OCCUPATIONAL PROGRAM.

PROGRAM, OPEN-ENDED—*See* OPEN-ENDED PROGRAM.

PROGRAM, REHABILITATION—*See* REHABILITATION PROGRAM.

PROGRAM, SCHOOL BREAKFAST (NATIONAL)—*See* SCHOOL BREAKFAST PROGRAM (NATIONAL).

PROGRAM, SUPPLEMENTARY—*See* SUPPLEMENTARY PROGRAM.

PROGRAM, TERMINAL—*See* TERMINAL PROGRAM.

PROGRAM, TRANSFER—*See* TRANSFER PROGRAM.

'ETERANS' DEPENDENTS' EDUCATIONAL ASSISTANCE—*See* VETERANS' DEPENDENTS' EDUCATIONAL ASSISTANCE PROGRAM.

PROGRAM, VETERANS' VOCATIONAL REHABILITATION—*See* VETERANS' VOCATIONAL REHABILITATION PROGRAM.

PROGRAM, WORK-STUDY—*See* WORK-STUDY PROGRAM.

PROGRAM OF STUDIES—A combination of related courses and/or self-contained classes organized for the attainment of specific educational objectives, e.g., a program of special education for handicapped students, a college preparatory program, an occupational program (in a given occupation or cluster of occupations), a general education program, and a transfer program. (VI, VII, VR)

PROGRAM-ORIENTED BUDGETING—The preparation of a budget which emphasizes categorization by programs and reflects consideration of present and future costs of these programs. It is more narrow in scope than a planning-programming-budgeting-evaluation system (PPBES) in that it does not include such factors as systematic planning and evaluation procedures and multi-year perspectives. (VII)

PROGRAMED INSTRUCTION—Instruction utilizing a workbook, a textbook, or mechanical and/or electronic device which has been "programed" to help pupils attain a specified level of performance by (a) providing instruction in small steps, (b) asking one or more questions about each step in the instruction and providing instant knowledge of whether each answer is right or wrong, and (c) enabling pupils to progress at their own pace. (VI)

PROGRAMING—Preparation of a logical sequence of operations to be performed by a computer in solving a problem or processing data, the preparation of coded instructions and data for such a sequence. (VII, IIR, IVR)

PROGRAMING ASSIGNMENT—An assignment to prepare logical coded sequences of operations to be performed by a computer in solving problems or processing data. (IIR, IVR)

**PROGRAMING SERVICES**—Activities concerned with the preparation of a logical sequence of operations to be performed, either manually or electronically, in solving problems of processing data, and the preparation of coded instructions and data for such sequences. (IIR, IVR)

**PROGRAMS FOR PUPILS WITH LEARNING DISABILITIES**—Special learning experiences for pupils identified as having deficiencies in one or more aspects of the cognitive process and as being underachievers in relation to the general level or mode of their overall abilities. (IIR, IVR)

**PROGRAMS FOR THE CULTURALLY DIFFERENT**—Special learning experiences for pupils whose background is so different from that of most pupils that they have been identified as needing additional educational opportunities beyond those provided in the usual school program if they are to be educated to the level of their ability. Certain types of these programs are referred to as “compensatory education programs.” (IIR, IVR)

**PROGRAMS FOR THE GIFTED AND TALENTED**—Special learning experiences for pupils identified as being mentally gifted or talented in areas such as the following: general academic, fine arts, and vocational and technical. (IIR, IVR)

**PROGRAMS FOR THE MENTALLY RETARDED**—Special learning experiences, according to degree of retardation, for pupils identified as being mentally retarded. Pupils in this category are classified educationally as educable mentally retarded, trainable mentally retarded, and severely mentally retarded. (IIR, IVR)

**PROGRAMS FOR THE PHYSICALLY HANDICAPPED**—Special learning experiences for pupils identified as having one or more physical handicaps, e.g., blindness, deafness, speech impairment, and lameness. (IIR, IVR)

**PROGRAMS FOR THE EMOTIONALLY DISTURBED**—Special learning experiences for pupils identified as having emotional problems that require special services. (IIR, IVR)

**PROJECT AREA**—As defined for Federal educational programs, a school attendance area, or combination of school attendance areas, which because of a high

concentration, children or families of specified characteristics is thereby designated as an area from which selected children may be served by a particular project. (VR) *See also* ATTENDANCE AREA.

**PROMOTION**—An advancement of a pupil to a higher grade or instructional level. (IV, V)

**PROPERTY, ADDITIONS TO**—*See* ADDITIONS TO PROPERTY.

**PROPERTY, LOSSES OF**—*See* LOSSES OF PROPERTY.

**PROPERTY, NONPUBLICLY-OWNED**—*See* NON-PUBLICLY-OWNED PROPERTY.

**PROPERTY, PUBLICLY-OWNED**—*See* PUBLICLY-OWNED PROPERTY.

**PROPERTY, REAL**—*See* REAL PROPERTY.

**PROPERTY, SCHOOL**—*See* SCHOOL PROPERTY.

**PROPERTY ACCOUNT**—A descriptive heading under which is recorded specific information about land, buildings, and equipment under the jurisdiction of school districts and any other units that operate schools. (III)

**PROPERTY ACCOUNTING**—Maintenance of a set of records under which is recorded specific information about land, buildings, and equipment. (III-VII)

**PROPERTY ACCOUNTING SERVICES**—Activities concerned with preparing and maintaining current inventory records of land, buildings, and movable equipment. These records are to be used in equipment control and facilities planning. (IIR, IVR)

**PROPERTY CONTROL**—The accounting for property through a system of records, physical inventories, and reports. (III)

**PROPERTY INSURANCE**—Expenditures for all forms of insurance covering the loss of, or damage to, property of the LEA from fire, theft, storm, or any other cause. Also recorded here are costs for appraisals of property for insurance purposes. (IIR)

**PROPERTY LOSSES**—*See* LOSSES OF PROPERTY

**PROPRIETARY ACCOUNTS**—Those accounts which show actual financial conditions and operations such as actual assets, liabilities, reserves, surplus, revenues, and expenditures, as distinguished from budgetary accounts. (II-III-IV) *See also* BUDGETARY ACCOUNTS.

**PROPRIETARY SCHOOL**—A private or nonpublic school which is operated for business profit. (VR) *See also* PRIVATE OR-NONPUBLIC SCHOOL.

**PRORATED SALARY**—That portion of a recognized full-time salary that is allocated to a less-than-full-time assignment on the same basis that the full-time equivalency of the assignment is determined. (IV)

**PRORATING**—The allocation of parts of a single expenditure to two or more different accounts. The allocation is made in proportion to the benefits which the expenditure provides for the respective purposes or programs for which the accounts were established. (II, III, VII, VIII, IX, X)

**PSYCHIATRIST**—A staff member who is a licensed physician performing professional services for the school system in the art and science of psychiatric medicine. (IV)

**PSYCHIATRIST ASSIGNMENT**—An assignment to a staff member who is licensed as a physician and certified as a psychiatrist to study, diagnose, and treat diseases and disorders of the mind. (VIII, IX)

**PSYCHOLOGICAL COUNSELING SERVICES**—Activities which take place between a school psychologist, counselor, or other staff member and one or more pupils as counselees and their parents, in which the pupils are helped to perceive, clarify, solve, and resolve problems of adjustment and interpersonal relationships. (VI-IX)

**PSYCHOLOGICAL PERSONNEL**—A term applied to psychologists and psychometrists. It does not apply to psychiatrists and psychiatric social workers; they are treated as health personnel. (I, II, III, IV)

**PSYCHOLOGICAL SERVICES**—Activities concerned with administering psychological tests and interpreting the results, gathering and interpreting information about pupil behavior, working with other staff members in planning school programs to meet the special needs of pupils as indicated by psychological tests and

behavioral evaluations, and planning and managing a program of psychological services, including psychological counseling for the school or local education agency. (VIII, IX)

**PSYCHOLOGICAL TESTING SERVICES**—Activities concerned with administering psychological tests, standardized tests, and inventory assessments of ability, aptitude, achievement, interests, and personality and the interpretation of these measures for pupils, school personnel, and parents. (VIII, IX)

**PSYCHOLOGIST**—*See* SCHOOL PSYCHOLOGIST.

**PSYCHOLOGIST ASSIGNMENT**—An assignment to a staff member who is licensed as a psychologist to evaluate and analyze pupils' behavior by measuring and interpreting their intellectual, emotional, and social development, and diagnosing their educational and personal disabilities. (IV-VIII, IX)

**PSYCHOLOGY** (subject matter)—*See* appendix, p. 244.

**PSYCHOMETRIC DATA**—Psychological data about a student analyzed by the application of mathematical and statistical methods developed for psychological testing. (VR)

**PSYCHOMETRIST**—A staff member assigned to perform professional activities in measuring the intellectual, social, and emotional development of pupils through the administration and interpretation of psychological tests. (IV)

**PSYCHOMETRIST ASSIGNMENT**—An assignment to perform activities concerned with measuring the intellectual, social, and emotional development of pupils through the administration and interpretation of psychological tests. These activities are usually carried out under the direction or supervision of a psychologist or related professional. (VIII, IX)

**PSYCHOMOTOR TEST**—An examination to measure the motor effects of a person's mental or cerebral processes. (VR)

**PSYCHOTHERAPY SERVICES**—Those activities which provide a therapeutic relationship between a qualified mental health professional and one or more pupils—in which the pupils are helped to perceive, clarify, solve, and resolve emotional problems or disorders. (IX)

**PUBLIC ADULT EDUCATION**—Those organized public educational programs, other than regular full-time and summer elementary and secondary day school, community college, and college programs, which provide opportunity for adult and out-of-school youth to further their education, regardless of their previous educational attainment. Only those programs which have as their primary purpose the development of skills, knowledge, habits, or attitudes are included. This development may be brought about by formal instruction or by informal group leadership directed toward recognizable learning goals. Activities which are primarily social, recreational, or for the purpose of producing goods, are not included. (I, II, III)

**PUBLIC BOARD OF EDUCATION**—The elected or appointed body which has been created according to State law and vested with responsibilities for educational activities in a given geographic area. Such bodies are sometimes known as school boards, governing boards, boards of directors, school committees, and school trustees. This definition includes State boards of education and the boards of intermediate and local basic administrative units and individual public institutions. (I-II, IV, V-VR)

**PUBLIC/COMMUNITY RELATIONS ASSIGNMENT**—An assignment to foster good relations between the LEA and the public community as a whole, by planning and conducting programs to disseminate information through such media as newspapers, radio and television, public forums, and civic activities; and reviewing material for and directing preparation of LEA publications. (IIR, IVR)

**PUBLIC GRANT**—A contribution, either money or material goods, made by one governmental unit to another unit and for which the contributing unit expects no repayment. Grants may be for specific or general purposes. (II, III, IIR, IVR)

**PUBLIC INFORMATION**—Information for public consumption through news media about the condition and progress of education in the LEA. It consists of such activities as writing news releases, speaking to civic groups or other assemblies, and appearing on local radio and television programs to discuss LEA programs. (IV-IIR, IVR)

**PUBLIC INFORMATION SERVICES**—Activities concerned with the writing, editing, and other preparation necessary to disseminate educational and adminis-

trative information to the public through various news media or personal contact. (IIR, IVR)

**PUBLIC LIBRARY**—A library operated by publicly elected or appointed officials and open to the public. When the library is supported wholly or partially by a public school the expense is charged to Community Services. (IIR, IVR)

**PUBLIC LIBRARY BUILDING**—A community services building used primarily for the custody, circulation, and administration of a collection of books, manuscripts, and periodicals kept for the use of the general public, but not for sale. (III)

**PUBLIC LIBRARY SERVICES**—Activities pertaining to the operation of public libraries by an LEA, or the provision of library services to the general public through the school library. Included are such activities as budgeting and planning the library's collection in relation to the community and informing the community of public library resources and services. (IV, IVR)

**PUBLIC OWNERSHIP**—Proprietorship by a governmental agency. (VII)

**PUBLIC RECORD**—A record which by law, regulation, or custom is generally available to the public at large, or to segments of the public having a legitimate reason for reviewing the record. (VR)

**PUBLIC RELATIONS**—See COMMUNITY RELATIONS.

**PUBLIC RESOURCES**—Facilities, finances, and staff personnel under the control of a governmental agency. (Unpublished VIII)

**PUBLIC SCHOOL**—A school operated by publicly elected or appointed school officials in which the program and activities are under the control of these officials and which is supported primarily by public funds. (I, II, III, IV, V-VI, VII, IIR, IVR, VR)

**PUBLIC SCHOOLHOUSING AUTHORITY**—See HOUSING AUTHORITY OBLIGATIONS.

**PUBLIC SERVICE OCCUPATIONS** (subject matter)—See appendix, p. 263.

**PUBLIC TRANSPORTATION ROUTES**—A statement



of the precise path (sequence of streets) and scheduled stops of each public transportation route. (Unpublished VIII)

**PUBLIC UTILITY SERVICES**—Services usually provided by public utilities such as water, sewerage, electricity, gas, and garbage. This includes those same services whether the utility company be public or private. Costs for telephone and telegraph are not charged here, but are recorded under Communication. (IIR)

**PUBLICLY-OWNED PROPERTY**—(a) Land, buildings, and equipment owned by a school district or unit operating schools or under its control through a contract to purchase; (b) land, buildings, and equipment owned by a municipal unit of government (not the unit operating the schools) or by a public-schoolhousing authority; and (c) land, buildings, and equipment owned by a State government or the Federal Government. (III)

**PUBLICLY-OWNED QUARTERS**—Any public school facility owned by a school administrative unit or under its control through a contract to purchase. Public school facilities designed for school purposes and owned by a county or municipal unit of government, public schoolhousing authority, or similar agency are included. (I, II, IIR)

**PUBLICLY-OWNED SCHOOLBUS**—A schoolbus owned by a school district, a municipal unit of government, a State government, or the Federal Government, which is used for the transportation of students, complies with the color and identification requirements set forth by the school system, and has a manufacturer's rated seating capacity of 12 or more. (The designation of schoolbus ownership is based on ownership of the chassis.) (VR)

**PUPIL**—See STUDENT.

**PUPIL ACCOUNTING SERVICES**—Activities concerned with accumulation and maintenance of records on school attendance, location of home, family characteristics, and other census data. Portions of these records become part of the cumulative record which is maintained for the purposes of counseling and guidance. (IIR, IVR)

**PUPIL ACTIVITY FUND**—Financial transactions related to school-sponsored pupil activities and inter

scholastic activities. These activities are supported in whole or in part by income from pupils, gate receipts, and other fund-raising activities. Support may be provided by local taxation. (IIR, IVR)

**PUPIL APPRAISAL SERVICES**—Activities having as their purpose an assessment of pupil characteristics, which are used in administration, instruction, and guidance and which assist the pupil in evaluating his purposes and progress in personality and career development. Test records and materials used for pupil appraisal are usually included in each pupil's cumulative record. (IIR, IVR)

**PUPIL-CLASSROOM TEACHER RATIO** (as of a given date)—The number of pupils in membership, as of a given date, divided by the number representing the total full-time equivalency of classroom teaching assignments serving these pupils on the same date. (IV, V, VI)

**PUPIL-CLASSROOM TEACHER RATIO** (for a period of time)—The average daily membership of pupils, for a given period of time, divided by the number representing the total full-time equivalency of classroom teaching assignments serving these pupils during the same period. (V, VI)

**PUPIL-COUNSELOR RATIO** (as of a given date)—The number of pupils in membership as of a given date, divided by the number representing the total full-time equivalency of counseling assignments serving these pupils on the same date. (VI)

**PUPIL-COUNSELOR RATIO** (for a period of time)—The average daily membership of pupils, for a given period of time, divided by the number representing the total full-time equivalency of counseling assignments serving these pupils during the same period. (VI)

**PUPIL DENSITY**—See PUPILS PER SQUARE MILE.

**PUPIL NUMBER**—See STUDENT NUMBER.

**PUPIL-NURSE RATIO** (as of a given date)—The number of pupils in membership, as of a given date, divided by the number representing the total full-time equivalency of nurse assignments serving these pupils on the same date. (VI)

**PUPIL-NURSE RATIO** (for a period of time)—The average daily membership of pupils, for a given period

of time, divided by the number representing the total full-time equivalency of nurse assignments serving these pupils during the same period. (VI)

**PUPIL PERSONNEL SERVICES**—All services which are concerned with the welfare of pupils, e.g., guidance services, health services, school psychological services, audiology services, speech pathology services, attendance services, and school social work services. (VI-VII)

**PUPIL PERSONNEL WORKER**—A staff member assigned to perform professional activities in any of the pupil personnel areas of attendance services, guidance services, health services, school psychological services, and school social work services. (IV)

**PUPIL-PRINCIPAL RATIO** (as of a given date)—The number of pupils in membership, as of a given date, divided by the number representing the total full-time equivalency of school direction and management assignments serving these pupils as of the same given date. (IV, V, VI)

**PUPIL-PRINCIPAL RATIO** (for a period of time)—The average daily membership of pupils in the elementary and secondary schools of a school system, for a given period of time, divided by the number representing the total full-time equivalency of school direction and management assignments serving these pupils during the same period. (V, VI)

**PUPIL-PROFESSIONAL EDUCATIONAL STAFF RATIO** (as of a given date)—See **STUDENT-PROFESSIONAL EDUCATIONAL STAFF RATIO** (as of a given date).

**PUPIL-PROFESSIONAL EDUCATIONAL STAFF RATIO** (for a period of time)—See **STUDENT-PROFESSIONAL EDUCATIONAL STAFF RATIO** (for a period of time)

**PUPIL-SCHOOL LIBRARIAN RATIO** (as of a given date)—The number of pupils in membership, as of a given date, divided by the number representing the total full-time equivalency of all school librarian assignments serving these pupils as of the same given date. (IV, V, VI)

**PUPIL-SCHOOL LIBRARIAN RATIO** (for a period of time)—The average daily membership of pupils, for a given period of time, divided by the number representing the total full-time equivalency of school librarian

assignments serving these pupils in school libraries during the same period. (V, VI)

**PUPIL-STAFF MEMBER RATIO**—See **STAFF MEMBER-PUPIL RATIO**.

**PUPIL-TEACHER RATIO** (as of a given date)—See **STUDENT-TEACHER RATIO** (as of a given date)

**PUPIL-TEACHER RATIO** (for a period of time)—See **STUDENT-TEACHER RATIO** (for a period of time)

**PUPIL-TOTAL STAFF RATIO** (as of a given date)—See **STUDENT-TOTAL STAFF RATIO** (as of a given date)

**PUPIL-TOTAL STAFF RATIO** (for a period of time)—See **STUDENT-TOTAL STAFF RATIO** (for a period of time)

**PUPIL TRANSPORTATION BUILDING**—A building used primarily for housing personnel and equipment engaged in activities which have as their purpose the conveyance of pupils to and from school activities, either between home and school or on trips for curricular or cocurricular activities. This includes building facilities for pupil transportation supervisors, mechanics, and clerks; bus waiting stations; and storage for vehicles and supplies used in the pupil transportation program. (III)

**PUPIL TRANSPORTATION SERVICES**—Activities concerned with the conveyance of pupils to and from school, as provided by State law. Included are all trips between home and school and trips to school activities. (III-IV, V, VI-VII-III, IVR)

**PUPIL TRANSPORTATION VEHICLE**—A vehicle owned by the school system or serving the school system through contractual arrangement and used for the purpose of conveying pupils to and from school activities, either between home and school or on trips involved in school activities. (IV)

**PUPIL UNIT OF MEASURE**—A standard or measurement having a pupil-related factor as its unit. Illustrative pupil units of measure for a period of time include average daily membership, average daily attendance, and full-time equivalency of average daily membership or attendance; pupil units of measure as of a given date include membership, attendance, and full-time equivalency of attendance. (VI) See also **MEASURE**.

**PUPILS PER SQUARE MILE**—The total number of resident pupils who live in a given attendance area of administrative unit, divided by the number of square miles in the attendance area or administrative unit. (V)

**PUPILS, TRANSPORTED**—The average daily attendance of transported pupils. (I)

**PURCHASE ORDER**—A written request to a vendor to provide material or services at a price set forth in the order; used as an encumbrance document. (II-IIB-VII-IIR)

**PURCHASED SERVICES**—Personal services rendered by personnel who are not on the payroll of the LEA; and other services which may be purchased by the LEA. (As applied to Stated education agencies, the definition in Handbook VII substitutes the words "State agency" for "LEA.") (VII-IIR) See also **CONTRACTED SERVICES**.

**PURCHASES DISCOUNT**—An allowance made because of either volume purchasing or seasonal purchasing. (IIB)

**PURCHASING**—Acquiring supplies, equipment, and materials used in school or LEA operation. (IIR)

**PURCHASING AGENT, ASSIGNMENT**—An assignment to perform activities concerned with buying supplies, equipment, and materials used in the operation of the LEA. (IV-IIR, IVR)

**PURCHASING SERVICES**—Activities concerned with purchasing supplies, furniture, equipment, and materials used in school or LEA operation. (IIR, IVR)

**PURE TONE AUDIOMETRIC TEST**—A test of hearing utilizing air conduction and/or bone conduction. (VR)

**QUALITY POINTS**—A term used synonymously with the term "mark points." (VR) See also **MARK POINTS** and **MARK VALUE**.

**QUANTITY FOOD OCCUPATIONS** (subject matter)—See appendix, p 263.

**QUARTER CREDIT HOUR**—A unit of measure, frequently used in higher education, denoting class

meetings of one hour a week for an academic quarter, generally about twelve weeks time. Satisfactory completion of a course scheduled for 3 class sessions (or the equivalent) per week in an academic quarter earns 3 quarter credit hours. (IV-VI-VII-IVR)

—R—

**RADIOLOGIC** (subject matter)—See appendix, p. 187.

**RANGE OF CLASS SIZES**—The smallest and largest memberships of classes of a given type as of a given date. (VR)

**RATE OF PAY**—The amount of money for a unit of time (e.g., an hour, a day, a week, a month, or a school year) paid a staff member for services to the school system. It is often used to indicate such rates of pay as daily rate for bus drivers, hourly rate for food services workers, and daily rate for substitute teachers. (IV)

**RATIO, PUPIL-STAFF MEMBER**—See **PUPIL-STAFF MEMBER RATIO**.

**RATIO, STAFF-MEMBER PUPIL**—See **STAFF-MEMBER PUPIL RATIO**.

**RATIO, STUDENT-ADMINISTRATIVE STAFF**—See **STUDENT-ADMINISTRATIVE STAFF RATIO**.

**RATIO, STUDENT-COUNSELOR**—See **STUDENT-COUNSELOR RATIO**.

**RATIO, STUDENT-INSTRUCTIONAL STAFF**—See **STUDENT-INSTRUCTIONAL STAFF RATIO**.

**RATIO, STUDENT-LIBRARY SERVICES STAFF**—See **STUDENT-LIBRARY SERVICES STAFF RATIO**.

**RATIO, TEACHER-INSTRUCTIONAL SUPERVISOR**—See **TEACHER-INSTRUCTIONAL SUPERVISOR RATIO**.

**READING**—Instruction designed to develop the skills necessary to perceive and react to patterns of written symbols and translate them into meaning. The teaching of reading is differentiated according to a number of levels and objectives. The continuous development of reading skills and vocabulary applies to all subject-matter areas, emphasizing selected skills and vocabulary appropriate to pupils' needs in different learning situations. (VI)

**READING LEVEL**—A level of achievement attained by readers, generally defined in terms of stages of reading development or grade placement of reading books, e.g., the reading-readiness level and the second-grade level. (VI)

**READING READINESS**—A variety of planned activities designed to develop in children the mental, physical, and emotional maturity prerequisite to instruction in reading. In practice emphasis is placed on a variety of learning situations, e.g., direct and vicarious experiences involving oral language, such as listening, speech habits and patterns, developing sequential organization of ideas, vocabulary development, and experience with books and stories. (VI)

**READING READINESS TEST**—An examination measuring interrelated factors contributing to a person's readiness for reading, such as linguistic maturity, experiential background, perceptual maturity, and responsiveness to books and storytelling. (VR)

**REAL ESTATE**—Land, improvements to site, and building; real property. (III, VII, IIR)

**REAL ESTATE** (subject matter)—See appendix, p. 164.

**REAL PROPERTY**—See REAL ESTATE.

**REBATES**—Abatements or refunds. (II, IIR)

**RECEIPTS**—Cash received. (IIR) See also REVENUE.

**RECEIVING AND DISBURSING SERVICES**—Activities concerned with taking in money and paying it out, including the current audit of receipts and the preaudit of requisitions or purchase orders to determine (1) whether the amounts are within the budgetary allowances; and (2) whether such disbursements are lawful LEA expenditures. (IIR-IVR)

**RECORD ENTRY** (staff)—An item of information about a staff member which is written into, checked, key punched, or otherwise placed on a form, card, or tape and kept for reference by the school system or other reporting unit. (IV)

**RECORD ITEM** (staff)—An item of information about a staff member which is maintained by a school or school system for present or future use. (IV)

**RECORD MANAGEMENT**—Establishing and main-

trating an adequate and efficient system for controlling the records of an LEA. (IIR, IVR)

**RECORDS**—A collection of information which is prepared by a person, unit, or organization for the use of that person, unit, or organization. (I, II, III, IV, V, VI, VII, IIR, IVR)

**RECORDS MAINTENANCE SERVICES**—Activities organized for the compilation, maintenance, and interpretation of cumulative records of individual pupils, including systematic consideration of factors such as home and family background; physical and medical status; standardized test results; personal and social development; and school performance. (IVR)

**RECORDS MANAGING ASSIGNMENT**—An assignment to perform activities concerned with establishing and maintaining an adequate and efficient system for controlling the records of the LEA. (IIR, IVR)

**RECREATION** (subject matter)—See appendix, p. 196.

**RECREATION AND TOURISM** (subject matter)—See appendix, p. 164.

**RECREATIONAL PERSONNEL**—Personnel employed by a school system for the primary purpose of administering or supervising play activities. (I)

**RECRUITMENT AND PLACEMENT**—Employing and assigning personnel for the LEA. (IIR, IVR)

**REDEMPTION OF PRINCIPAL**—Expenditures from current funds to retire serial bonds, long-term loans of more than five years, and short term loans of less than five years. (IIR)

**REDEVELOPMENT**—The revision or replacement of an existing land use and/or population distribution pattern through the acquisition of an essentially built-up area and its clearance and rebuilding to a comprehensive plan. (Unpublished VIII)

**REENTRY**—A student who previously entered any class in the same elementary or secondary school or in any other school in the United States or its outlying areas. (I-V-VR)

**REFERENCE WEEK**—A week used for determining the number of hours worked by members of the labor

force. For data published by the Bureau of the Census this week is usually one ending in mid-November. (Unpublished VIII)

**REFERRAL**—The act of referring a pupil to a person or agency for study and assistance, whether this person or agency be within or outside the school system. (V)

**REFRESHER AND REORIENTATION TRAINING FOR PROFESSIONALS**—Short intensive courses for unemployed or potentially unemployed professional persons who are not seeking to qualify for initial employment in a professional occupation but who need to develop their particular professional skills or a new skill so as to maintain their present employment or qualify for new employment within their professions. (VI)

**REFRIGERATION** (subject matter)—See appendix, p. 248.

**REFUGEE**—An alien who (a) fled from a given nation or area because of persecution or fear of persecution on account of race, religion or political opinion, (b) cannot return thereto because of fear of such persecution, and (c) is in urgent need of assistance for the essentials of life. (VI)

**REFUND**—A return of an over-payment or over-collection. The return may be either in the form of cash or a credit to an account. (II-IIB, IIR)

**REFUND OF PRIOR YEAR'S EXPENDITURES**—Revenue coming from a refund of an expenditure made to a prior fiscal year's budget. A refund of an expenditure made in the same fiscal year's budget may be recorded in the appropriate expenditure account as a reduction of the expenditure. (IIR)

**REFUNDING BONDS**—Bonds issued to pay off bonds already outstanding. (II, IIR)

**REGISTER**—A record for the consecutive entry of a certain class of events, documents, or transactions, with a proper notation of all of the required particulars. The form of register for accounting purposes varies from a one column to a multi-columnar sheet of special design whereon the entries are distributed, summarized, and aggregated usually for convenient posting to the accounts. (II, III, IIR)

**REGISTERED NURSING ASSIGNMENT**—An assign-

ment to a staff member who is licensed as a registered nurse to perform activities requiring substantial specialized judgment and skill in observation, care, and counsel of ill and injured persons and in illness prevention. (IIR, IVR)

**REGISTERED WARRANT**—A warrant which is registered by the paying officer for future payment on account of present lack of funds, and which is to be paid in the order of its registration. In some cases, such warrants are registered when issued; in others, when first presented to the paying officer by the holders. (II, IIR) See also **WARRANT**.

**REGISTRANT**—A person who has registered for a particular educational program, but who may or may not actually participate in the program. (Unpublished IX)

**REGISTRAR ASSIGNMENT**—An assignment to coordinate and direct LEA registration activities, including compilation and analysis of registration data for administrative use. (IIR, IVR)

**REGISTRATION**—The process of entrance into a school or course. The act of placing the student's name on the rolls of the school or school system does not ensure that the student will attend the school (or a school in the school system) and does not constitute entering into membership status. (V-VR) See also **ACTIVE MEMBERSHIP STATUS**.

**REGULAR CLASS**—The general type of class in which most students receive instruction, including most classes other than those which are composed of exceptional students. (V, VI, IVR, VR)

**REGULAR CLASSROOM**—An instructional space which is designed, or adapted, in such a manner that it can be used to house any class that does not require special built-in equipment tailored to its specific needs. (III-VII)

**REGULAR DAY SCHOOL TRANSPORTATION**—Transportation of pupils attending regular day school. Separate accounts may be maintained for transportation fees received from patrons, and for transportation fees received from other LEA's. (IIR) See also **DAY SCHOOL**.

**REGULAR DAY SCHOOL TUITION**—Tuition for resident and nonresident pupils attending the regular.

day schools in the LEA. Separate accounts may be maintained for tuition received from patrons, and for tuition received from other LEA's. (IIR) See also DAY SCHOOL.

**REGULAR 4-YEAR HIGH SCHOOL**—See. FOUR-YEAR HIGH SCHOOL.

**REGULAR PROGRAMS**—Instructional activities designed primarily to prepare pupils for activities as citizens, family members, and workers, as contrasted with programs designed to improve or overcome physical, mental, social, and/or emotional handicaps. Regular programs include Elementary Programs; Middle/Junior High Programs; High School Programs; and Other Regular Programs. (IIR, IVR)

**REGULAR PROGRAMS, STATE EDUCATION AGENCIES**—Those programs, other than the direct operation of schools, which are carried out year after year by a State education agency as a permanent part of its activities. These are programs such as: Provision of consultative service to local school districts in administration, curriculum, finance; and transportation; research and statistical services; distribution of State aid; professional licensing; and operation of the State library. (I)

**REGULAR SALARIES**—Full-time, part-time, and prorated portions of the gross salary costs for work performed by employees of the LEA who are considered to be in positions of permanent nature. (IIR, IVR)

**REGULAR SCHOOL TERM**—That school term which begins usually in the late summer or fall and ends in the spring. A regular school term may be interrupted by one or more vacations. In higher education, this is referred to as the "academic year." (IV, V, VI-VR)

**REGULAR STUDENT**—In community/junior colleges, an unrestricted status for students who meet all the regular admission requirements of the institution. (VR)

**REGULATION (State education agency)**—A rule adopted by a State education authority and usually possessing the force of law under legislative sanction. Commonly used synonymously with "rule." (VII)

**REHABILITATION (subject matter)**—See appendix, p. 186.

**REHABILITATION OF A BUILDING**—The general overhauling of a complete building or major section thereof to better adapt it for continued use for the school program or a different type of occupancy. (III)

**REHABILITATION PROGRAM**—A program of studies and services designed primarily to restore in whole or in part the ability of disabled individuals to perform biologically, psychologically, or sociologically as persons not disabled. This includes rehabilitation center programs and vocational rehabilitation programs for restoring individuals to economic self-sufficiency through education or retraining. (VI)

**REIMBURSEMENT**—The return of an over-payment or over-collection in cash. (II-IIB, IIR)

**RELEASED TIME**—An arrangement whereby a school officially and regularly excuses one or more full-time students or members of the staff for part of a session. (VI, VR)

**REMEDIAL READING**—Planned, diagnostic and remedial activities, for individual pupils or groups of pupils, designed to correct and prevent further reading difficulties which interfere with the pupil's expected progress in developing reading skills, understandings, and appreciations. (VI)

**REMEDIAL SPECIALIST ASSIGNMENT**—An assignment to perform activities concerned with correcting or improving specific marked deficiencies (such as a deficiency in content previously taught but not learned) which are not due to impairment of mental or physical ability. (IIR, IVR)

**REMODELING**—Any major permanent structural improvement to a building. It includes changes of partitions, roof structure or walls. Repairs are not included here but are included under maintenance. (I, II, III, IIR)

**RENOVATION OF A BUILDING**—The renewing of a building or part thereof without changing structure, function, or design. (III)

**RENTALS EXPENDED**—Expenditures for the lease or rental of land, buildings, and equipment for the temporary or long-range use of the LEA. This includes bus and other vehicle rental when operated by LEA personnel, lease of data processing equipment, lease-purchase arrangements, and similar rental agreements.

Costs for single agreements covering equipment as well as operators are not charged here, but are recorded elsewhere under **PURCHASED SERVICES**. (IIR)

**RENTALS RECEIVED**—Money received from the rental of school property, real or personal. It does not include rental from real property held for income purposes; this revenue is recorded under the account **EARNINGS ON INVESTMENTS**. Separate accounts may be maintained for real property, textbooks, equipment, lockers, towels, and other. (IIR)

**REPAIR AND REPLACEMENT OF EQUIPMENT RESPONSIBILITY**—The area of responsibility for keeping the equipment (*not* built-in equipment) of the school system in good repair and for manufacturing equipment to replace worn out equipment. It consists of such activities as repairing furniture, machines, and other equipment that is not built-in; and manufacturing replacement tables, benches, bookcases, racks, and other equipment that is not built-in. (IV)

**REPAIR OF BUILDINGS RESPONSIBILITY**—The area of responsibility for keeping the buildings and built-in equipment of the school system at their original condition of completeness and efficiency as far as possible through repair and replacement. It consists of such activities as repainting, resurfacing, and refinishing floors, walls, and ceilings; repairing and replacing windows, doors, hardware, window glass, window shades, and built-in equipment such as lockers, cabinets, soap and towel dispensers, and bulletin boards; moving portable structures; and maintaining, repairing, and replacing such things as boilers, radiators, electric lighting systems, toilets, water pipes, fire sprinkler systems, air-conditioning systems, and elevators. (IV)

**REPAIRS**—The restoration of a given piece of equipment, of a given building, or of grounds to original condition of completeness or efficiency from a worn, damaged, or deteriorated condition. (I, III, IIR) *See also* **MAINTENANCE OF PLANT**.

**REPAIRS AND MAINTENANCE SERVICE**—Repairs and maintenance services not provided directly by LEA personnel. This includes contracts and agreements covering the upkeep of grounds, buildings, and equipment. Costs for new construction, renovating and remodeling are not charged here, but are recorded under **Capital Outlay**. (IIR)

**REPLACEMENT COST**—The cost of replacing a piece

of property with another of new material of like kind and quality in a given time and place. (III)

**REPLACEMENT COST OF A BUILDING**—The cost of replacing a building with another of new material of like kind and quality in a given time and place. (III)

**REPLACEMENT COST OF A SITE**—The cost of purchasing the land and reproducing the improvements to the site at the place the site occupies and under conditions prevailing at the time the replacement cost is determined. (III)

**REPLACEMENT COST OF EQUIPMENT**—The cost of replacing a piece of equipment with another of new material of like kind and quality in a given time and place. (III)

**REPLACEMENT OF EQUIPMENT**—A complete unit of equipment purchased to take the place of another complete unit of equipment which is to be sold, scrapped, or written off the record, and serving the same purpose as the replaced unit in the same way. (I, III, IIR)

**REPORT**—A collection of information which is prepared by a person, unit, or organization for the use of some other person, unit, or organization. (I, II, III-IV, V, VI, VII, IIR, IVR, VR)

**REPORT ITEM (staff)**—An item of information about a staff member or a group of staff members which is prepared by an individual, organization, or agency for the use of some other individual, organization, agency, or the general public. (IV)

**REPORTING PERIOD**—A period of time for which a report is prepared (e.g., a calendar year, school year, regular school term, summer school term, semester, or marking period). (IV, V, VI, VII, VR)

**REPORTING UNIT**—The organizational unit submitting a report (e.g., a State department of education, an intermediate administrative unit, a local basic administrative unit, or a school). (IV, V, VI, VR)

**REQUISITION**—A written request to a purchasing officer for specified articles or services. It is a request from one school official to another school official, whereas a purchase order is from a school official (usually the purchasing officer) to a vendor. (II-IIB, IIR)

**RESEARCH**—Systematic study and investigation in some field of knowledge, undertaken to establish facts or principles. (VII, IIR, IVR) *See also* **BASIC RESEARCH** and **APPLIED RESEARCH**.

**RESEARCH AND DEVELOPMENT** (subject matter)—*See* appendix p. 205.

**RESEARCH AND DEVELOPMENT ASSIGNMENT**—An assignment to perform activities concerned with systematic studies and investigations in some field of knowledge and with the evolving process of using the products of research and judgment to improve educational programs. (IIR, IVR)

**RESEARCH, PLANNING, DEVELOPMENT, AND EVALUATION**—The activities involved with research, planning, development, and evaluation functions for the LEA. (IIR, IVR)

**RESEARCH SERVICES**—Activities concerned with the systematic study and investigation of the various aspects of education, undertaken to establish facts and principles. (IIR, IVR)

**RESERVE**—An amount set aside for some specified purpose. (II, IIB, IIR)

**RESERVE FOR "A" (SPECIAL PURPOSES)**—A reserve which represents the segregation of a portion of a fund balance to indicate that assets equal to the amount of the reserve are tied up for the named special purpose. (IIR)

**RESERVE FOR ENCUMBRANCES**—A reserve representing the segregation of a portion of a fund balance to provide for unliquidated encumbrances. Separate accounts may be maintained for current and prior year encumbrances. (IIR)

**RESERVE FOR INVENTORY**—A reserve which represents the segregation of a portion of a fund balance to indicate that assets equal to the amount of the reserve are tied up in inventories of supplies and inventories on hand and not issued to requesting units. (IIR)

**RESIDENT**—An individual who lives within a given administrative unit. (V)

**RESIDENT CHILD**—A child who lives within a given administrative unit. (V)

**RESIDENT CHILDREN PER SQUARE MILE**—The total number of resident children, by age, who live in a given attendance area or administrative unit, divided by the number of square miles in the attendance area or administrative unit. (V)

**RESIDENT STUDENT**—A student whose legal residence is within the geographic area served by a specified school, school system, or institution. (IIR, IVR-VR) *See also* **ATTENDANCE CENTER**; **SCHOOL ATTENDANCE AREA**; **RESIDENT STUDENT OF AN ADMINISTRATIVE UNIT (OR SCHOOL DISTRICT)**; **RESIDENT STUDENT OF AN INSTITUTION**; and **RESIDENT STUDENT OF AN ATTENDANCE AREA**.

**RESIDENT STUDENT OF ADMINISTRATIVE UNIT (OR SCHOOL DISTRICT)**—A student whose legal residence is within a specified administrative unit (or school district). (V-VR)

**RESIDENT STUDENT OF AN INSTITUTION**—A student who resides during a school term in an institution (such as a residential school or residential child-caring institution) rather than in a private home. (V-VR) *See also* **RESIDENTIAL SCHOOL**.

**RESIDENT STUDENT OF SCHOOL ATTENDANCE AREA**—A student whose legal residence is within the geographic area served by the school he attends. (V-VR) *See also* **SCHOOL ATTENDANCE AREA**.

**RESIDENTIAL SCHOOL**—An educational institution in which students are boarded and lodged as well as taught. (IV, V, VI, VR)

**RESIDENTIAL SCHOOL FOR SPECIAL EDUCATION**—A residential school providing a program of education for handicapped students. (V, VI-VR)

**RESOURCE CENTER**—An instructional space designed, or adapted, as a place for reading, viewing, listening, and otherwise studying about one or more specific subject-matter areas, and for the custody, circulation, production, and administration of related supplies and equipment for the use of the student body and school staff. For inventory purposes, such a space is considered to be a school library instructional space (VI)

**RESOURCE UNIT**—A written plan or collection of materials including, for a given segment of instruction,



a variety of learning experiences, resources, and evaluation techniques from which teachers may select those deemed best suited for each pupil or group of pupils. (VI)

**RESOURCES** (as distributed by a State education agency)—Money, materials, or services which may be available to a local or intermediate basic administrative unit by or through the State education agency. (VII)

**RESPONSIBILITY-ORIENTED BUDGETING**—A plan of financial operation expressed in terms of the allocation of each organizational unit within the department. The word "location" is sometimes used to refer to the organizational unit. (VII)

**RESTRICTED GRANTS-IN-AID**—Revenues received as grants by the LEA which must be used for a categorical or specific purpose. If such money is not completely used by the LEA, it usually must be returned to the government unit. Separate accounts may be maintained for general source grant-in-aid which is not related to specific revenue sources of the governmental unit, and for those assigned to specific source of revenue as appropriate. (IIR)

**RESTRICTION ON SCHOOL ACTIVITIES**—The manner in which a pupil's school activities are curtailed because of a physical condition or for any other reason. (V)

**RETAILING** (subject matter)—See appendix, p. 167.

**RETAINED PERCENTAGE**—An agreed-on percentage of a contractor's requisition which is withheld from payments pending satisfactory completion of the project. (IIB)

**RETENTION**—See NONPROMOTION.

**RETIREMENT**—Separation resulting from a staff member leaving the LEA in accordance with the provision of a specific program allowing or requiring a staff member to leave upon reaching a certain age, a certain number of years of service, or upon sustaining a disability. (IV-IVR)

**RETIREMENT FUND SYSTEM**—A plan whereby a fund of money, built up through contributions from participants and other sources, is used to make regular payments to those who retire from service in the educational system by reason of age, disability, or length of service. (I, II-IV, VII-IIR, IVR)

**RETIREMENT PROGRAM**—The program adopted by an LEA which formally specifies the benefits that staff members will receive at various ages and lengths of service. (IVR)

**RETRAINING FOR NEW OCCUPATION PROGRAMS**—Learning experiences concerned with the skills and knowledge required for preparation for employment in a new and different occupation. (IIR, IVR)

**RETRIEVAL OF INFORMATION**—Locating and recovering information from wherever it may be stored. (IV, V, VII, VR)

**REVENUE LEDGER**—The subsidiary ledger in which the detailed revenue accounts are maintained. (IIB)

**REVENUES**—Addition to assets which do not increase any liability, do not represent the recovery of an expenditure, do not represent the cancellation of certain liabilities without a corresponding increase in other liabilities or a decrease in assets, and do not represent contributions of fund capital in Food Service and Pupil Activity funds. (I, II, IIB-IIR, IVR)

**REVENUES COLLECTED IN ADVANCE**—A liability account which represents revenues collected before they become due. (IIR)

**REVOLVING FUND**—A fund provided to carry out a cycle of operations. The amounts expended from the fund are restored from earnings from operations or by transfers from other funds so that it remains intact, either in the form of cash, receivables, inventory, or other assets. These funds are also known as reimbursable funds. (I, II, VII, IIR)

**RHYTHM AND BODY MOVEMENT** (subject matter)—See appendix, p. 194.

**ROOM**—Space enclosed with walls or partitions, of fixed or movable type, that provide an acceptable sound barrier. Rooms with movable walls or partitions are counted on the basis of the primary or principal use for which designed and not the secondary use for which adapted. (III)

**RURAL SOCIETY**—That portion of organized society living in rural areas with emphasis on rural trends and problems. (Unpublished VIII)

**SABBATICAL LEAVE**—See PROFESSIONAL LEAVE.

**SAFE PEDESTRIAN CIRCULATION PATTERNS**—The determination of that route or set of routes that a pedestrian may traverse between two or more points which will allow for maximum safety (through avoidance of high accident intersections, minimizing of necessary street crossings, etc.). (Unpublished VIII)

**SAFETY AND DRIVER EDUCATION** (subject matter)—See appendix, p. 279.

**SAFETY EDUCATION** (subject matter)—See appendix, p. 280.

**SAFETY IN DAILY LIVING** (subject matter)—See appendix, p. 191.

**SALARY**—The total amount regularly paid or stipulated to be paid to an individual, before deductions, for personal services rendered while on the payroll of the LEA. Payments for sabbatical leave are also considered as salary. (II, IIR, IVR)

**SALE OF FIXED ASSETS**—Proceeds from the sale of school property. Separate accounts may be maintained for sale of real property and for sale of equipment. (IIR)

**SALE VALUE**—Value of a final product, commonly used in determination of value added by manufacturing. (Unpublished VIII)

**SALES AND USE TAX**—Taxes imposed upon the sale and consumption of goods and services. It can be imposed either as a general tax on the retail price of all goods and/or services sold within the LEA jurisdiction with few or limited exemptions, or as a tax upon the sale or consumption of selected goods and services. Separate accounts may be maintained for general sales tax and for selective sales taxes. (IIR)

**SALES OF BONDS**—Proceeds from the sales of bonds, except that if bonds are sold at a premium, only those proceeds representing the par value of the bonds would be included. The proceeds from the sale of bonds constitute a revenue of the Capital Projects Fund but not of the LEA as a whole. (IIR)

**SALES TO ADULTS**—Money received from adults for

sale of food products and services. Regular meals or food products sold to staff can be segregated from special dinners and affairs for special purposes by maintaining separate accounts. (IIR)

**SALES TO PUPILS**—Money received from pupils for sale of food products and services. Better financial control and analysis and reporting for Federal and State reimbursements can be obtained by maintaining separate accounts by type of sales, such as type of lunch sales, milk program sales, and other sales. (IIR)

**SALESMANSHIP PRINCIPLES** (subject matter)—See appendix, p. 160.

**SALVAGE VALUE**—The actual or prospective selling price less the cost of removal or disposal of buildings and equipment that have been retired from service or damaged, but are not junked. (III)

**SAMPLE**—A limited number of cases selected for study from a particular population. (Unpublished VIII)

**SCHEDULING CYCLE**—The period of time over which a unit of a school schedule extends before it is repeated. Traditional schedules usually have a one-day cycle while in more flexible schedules the cycle may extend for several days or weeks before it is repeated. (VI)

**SCHOLARSHIPS**—Awards, usually of money or of free or reduced tuition, given deserving students as recognition of achievement or as encouragement. (VR)

**SCHOLASTIC APTITUDE TEST**—An examination of the potential of a person to succeed academically, as measured by tests of performance. (VR)

**SCHOOL**—A division of the school system consisting of students comprising one or more grade groups or other identifiable groups, organized as one unit with one or more teachers to give instruction of a defined type, and housed in a school plant of one or more buildings. More than one school may be housed in one school plant, as is the case when the elementary and secondary schools are housed in the same school plant. (I, II, III-IV, V, VI, VII, IIR, IVR-VR)

**SCHOOL, ADULT**—See ADULT SCHOOL.

**SCHOOL, AREA**—See AREA SCHOOL.

**SCHOOL, AREA VOCATIONAL**—See AREA VOCATIONAL SCHOOL.

**SCHOOL, AVERAGE MEMBERSHIP PER**—See AVERAGE MEMBERSHIP PER SCHOOL.

- SCHOOL, BOARDING—See BOARDING SCHOOL.
- SCHOOL, BUSINESS—See BUSINESS SCHOOL.
- SCHOOL, COMMUNITY—See COMMUNITY SCHOOL.
- SCHOOL, COMPREHENSIVE HIGH—See COMPREHENSIVE HIGH SCHOOL.
- SCHOOL, DAY—See DAY SCHOOL.
- SCHOOL, DEPARTMENT OF DEFENSE OVERSEAS DEPENDENTS—See DEPARTMENT OF DEFENSE OVERSEAS DEPENDENTS SCHOOL.
- SCHOOL, ELEMENTARY—See ELEMENTARY SCHOOL.
- SCHOOL, EXTENDED SECONDARY—See EXTENDED SECONDARY SCHOOL.
- SCHOOL, FIVE-OR 6 YEAR HIGH—See FIVE-OR 6 YEAR HIGH SCHOOL.
- SCHOOL, FOUR-YEAR HIGH—See FOUR-YEAR HIGH SCHOOL.
- SCHOOL, GRADED—See GRADED SCHOOL.
- SCHOOL, INCOMPLETE HIGH—See INCOMPLETE HIGH SCHOOL.
- SCHOOL, INDEPENDENT AMERICAN OVERSEAS—See INDEPENDENT AMERICAN OVERSEAS SCHOOL.
- SCHOOL, INDEPENDENT NONPROFIT—See INDEPENDENT NONPROFIT SCHOOL.
- SCHOOL, INDEPENDENT PROPRIETARY—See INDEPENDENT PROPRIETARY SCHOOL.
- SCHOOL, IN-MIGRATION INNER CITY—See IN-MIGRATION INNER CITY SCHOOL.
- SCHOOL, JUNIOR HIGH—See JUNIOR HIGH SCHOOL.
- SCHOOL, JUNIOR-SENIOR HIGH—See JUNIOR-SENIOR HIGH SCHOOL.
- SCHOOL, KINDERGARTEN—See KINDERGARTEN SCHOOL.
- SCHOOL, LABORATORY, MODEL, OR PRACTICE—See LABORATORY, MODEL, OR PRACTICE SCHOOL.
- SCHOOL, MIDDLE—See MIDDLE SCHOOL.
- SCHOOL, MIDDLE/JUNIOR HIGH—See MIDDLE/JUNIOR HIGH SCHOOL.
- SCHOOL, MODEL—See MODEL SCHOOL.
- SCHOOL, NEIGHBORHOOD—See NEIGHBORHOOD SCHOOL.
- SCHOOL, NONGRADED—See NONGRADED SCHOOL.
- SCHOOL, NONPUBLIC—See NONPUBLIC SCHOOL.
- SCHOOL, NURSERY—See NURSERY SCHOOL.
- SCHOOL, ONE-TEACHER—See ONE-TEACHER SCHOOL.
- SCHOOL, PREPRIMARY—See PREPRIMARY SCHOOL.
- SCHOOL, PRIMARY—See PRIMARY SCHOOL.
- SCHOOL, PRIVATE OR NONPUBLIC—See PRIVATE OR NONPUBLIC SCHOOL.
- SCHOOL, PUBLIC—See PUBLIC SCHOOL.
- SCHOOL, REGULAR 4-YEAR HIGH—See REGULAR 4-YEAR HIGH SCHOOL.
- SCHOOL, RESIDENTIAL—See RESIDENTIAL SCHOOL.
- SCHOOL, SECONDARY—See SECONDARY SCHOOL.
- SCHOOL, SENIOR HIGH—See SENIOR HIGH SCHOOL.
- SCHOOL, SINGLE—See SINGLE SCHOOL.
- SCHOOL, SPECIAL—See SPECIAL SCHOOL.
- SCHOOL, SUMMER—See SUMMER SCHOOL.

**SCHOOL, TECHNICAL HIGH**—See **TECHNICAL HIGH SCHOOL**.

**SCHOOL, UNGRADED ELEMENTARY**—See **UNGRADED ELEMENTARY SCHOOL**.

**SCHOOL, UNGRADED HIGH**—See **UNGRADED HIGH SCHOOL**.

**SCHOOL, UNGRADED**—See **UNGRADED SCHOOL**.

**SCHOOL, VOCATIONAL OR TRADE HIGH**—See **VOCATIONAL OR TRADE HIGH SCHOOL**.

**SCHOOL ADMINISTRATION**—Consists of those activities which have overall administrative responsibility for a single school or a group of schools. (IIR, IVR)

**SCHOOL AGE**—See **AGE AS OF SEPTEMBER 1 AND COMPULSORY SCHOOL ATTENDANCE AGE**.

**SCHOOL APPROPRIATION**—Money received out of funds set aside periodically by the appropriating body (district meeting, city council, or other governmental bodies) for school purposes; which funds have not been specifically collected as school taxes. (II, IIR)

**SCHOOL ATTENDANCE AREA**—The geographic area which is served by a school. It does not necessarily constitute a local taxing unit and likewise does not necessarily have an independent system of administration. Attendance areas for elementary schools may or may not be coterminous with attendance areas for secondary schools. (I, V, VII, VR)

**SCHOOL BOARD**—See **BOARD OF EDUCATION**.

**SCHOOL BREAKFAST PROGRAM (NATIONAL)**—A program whereby the Secretary of Agriculture assists State education agencies through grants-in-aid and other means to establish, maintain, operate, and expand nonprofit breakfast programs in all schools making application for assistance and agreeing to operate a nonprofit breakfast program in accordance with regulations of the Child Nutrition Act, as amended. (VR)

**SCHOOL CAFETERIA**—See **CAFETERIA**.

**SCHOOL CENSUS**—An enumeration and collection of data, as prescribed by law, to determine the name, age, address, and other pertinent information about chil-

dren and youth who reside within the geographic boundaries of a local education agency. (IV, V, VII-IVR, VR)

**SCHOOL CENSUS AGE**—The age span of children and youth included in the school census. (V, VII, VR)

**SCHOOL DISTRICT**—A term used synonymously with the term "local basic administrative unit." (II, III, IV, V, VI, VR) See also **LOCAL BASIC ADMINISTRATIVE UNIT**.

**SCHOOL DISTRICT REORGANIZATION**—The changing of boundary lines of local or intermediate basic administrative units, the merging of existing districts, and the creation of new districts, under the provisions of State law. (VII)

**SCHOOL FACILITY**—A building or site belonging to or used by a school or school system for school purposes. (V)

**SCHOOL FINANCE**—The systems, methods, and procedures whereby funds are provided for the support of education. (VII)

**SCHOOL FISCAL YEAR**—See **SCHOOL YEAR**

**SCHOOL FOR EXCEPTIONAL CHILDREN**—A special school composed of children who have been identified by professionally qualified personnel as requiring special educational planning and services. (III-V-VI) See also **EXCEPTIONAL CHILDREN**.

**SCHOOL HOLIDAY**—A day on which school is not conducted either because of legal provisions or because of designation by the board of education as a holiday. Since such days are not considered as days in session, the students are considered as being neither present nor absent on school holidays. (V, VI, VR)

**SCHOOL LEAVER**—A term used synonymously with the term "dropout." (VR) See **DROPOUT**.

**SCHOOL LIBRARIAN ASSIGNMENT**—An assignment to a staff member to perform professional school library service activities such as ordering, cataloguing, processing, and circulating books and other materials; planning the use of the library by teachers, pupils, and others; selecting books and materials; participating in faculty planning for the use of books and materials; and guiding teachers, pupils, and others in the use of the library in school programs. (V)

**SCHOOL LIBRARY**—An instructional space designed, or adapted, as a place for study and reading, and for the custody, circulation, and administration of a collection of books, manuscripts, and periodicals kept for the use of the student body and school staff, but not for sale. Study carrels, audiovisual, storage, and other service areas opening into, and serving as adjuncts to, a particular library are considered parts of the library area. When school library services and audiovisual services are located in the same instructional space, this space frequently is referred to as an "instructional materials center." (III-VI)

**SCHOOL LIBRARY SERVICES**—Activities such as selecting, acquiring, preparing, cataloging, and circulating books and other printed materials; planning the use of the library by teachers and other members of the instructional staff; and guiding instructional staff members in their use of library books and materials, whether maintained separately or as a part of an instructional materials center or related work-study area. (IV-VI, IVR)

**SCHOOL LUNCH**—Any lunch served by the school, approximating the minimum nutritional standards of the U.S. Department of Agriculture, regardless of who pays for it. (V) *See also* NATIONAL SCHOOL LUNCH PROGRAM.

**SCHOOL MONTH**—For school recordkeeping purposes, a period frequently construed to comprise 20 school days, or 4 weeks of 5 days each. (VI)

**SCHOOL PLANT**—The site, buildings, and equipment constituting the physical facilities used by a single school or by two or more schools sharing the use of common facilities. (I, II, III, IV, V, VI, VII, IVR, VR)

**SCHOOL PROPERTY**—Land, improvements to site, buildings, and equipment used for public school purposes, including both publicly-owned and non-publicly-owned. (III)

**SCHOOL PSYCHOLOGIST**—A staff member who, in addition to performing assigned professional services of psychological evaluation and analysis of pupils through such activities as measuring and interpreting the pupils' intellectual, emotional, and social development, and diagnosing educational personal disabilities of the pupils, also serves the school system through such activities as collaborating in planning appropriate educational programs, conducting research in the area of

pupil adjustments and behavior, and assisting other staff members with specific problems of a psychological nature and broadening their understanding of the psychological forces with which they deal. (IV)

**SCHOOL SESSION**—*See* SESSION.

**SCHOOL SITE**—The land and all improvements to the site, other than structures, such as grading, drainage, drives, parking areas, walks, plantings, play courts, and playgrounds. (I, II, III, VII, IIR, IVR)

**SCHOOL SOCIAL WORK**—Professional services for the assistance in the prevention and solution of personal, social, and emotional problems of pupils which involve family, school, and community relationships when such problems have a bearing upon the quality of the school work of the pupil. (IV, VI, VII) *See also* ATTENDANCE and SOCIAL WORK SERVICES.

**SCHOOL SYSTEM**—All the schools and supporting services controlled by a board of education or by any other organization which operates one or more schools. (IV, V, VI-IIR, IVR-VR) *See also* LOCAL EDUCATION AGENCY.

**SCHOOL TERM**—A prescribed span of time (e.g., a number of days, weeks, or months) when school is open and the students are under the guidance and direction of teachers. (IV, V, VI, VII, IIR, IVR-VR)

**SCHOOL YEAR**—The 12-month period of time denoting the beginning and ending dates for school accounting purposes, usually from July 1 through June 30. This sometimes is referred to as the "school fiscal year." (IV, V, VI-VII, IVR-VR) *See also*, REGULAR SCHOOL TERM.

**SCHOOLBUS**—A vehicle used for transporting students with a manufacturer's rated seating capacity of 12 or more. (Seating capacity figures on the basis of at least 13 inches of seat space per pupil.) (I, II, III-IV, V-VII-IIR, IVR)

**SCHOOLBUS ACCIDENT**—An accident involving a schoolbus, when in authorized use, which results in personal injury or property damage, as when a child is injured by the bus or on the bus, or one involving a child immediately before boarding the bus (if the bus is arriving to take on children) or immediately after leaving the bus (before the bus has left the scene). (I)

**SCHOOLBUS DRIVER**—See **BUS DRIVER**.

**SCHOOLBUS RUN**—The course followed by a schoolbus during a continuous trip enroute to or from school, from the first pickup of students to final unloading at school, at a transfer point, or at the last bus stop. (VR)

**SCHOOLDAY**—That part of a calendar day when school is in session. (IV, V, VI, VII, VR)

**SCHOOLHOUSING AUTHORITY**—See **PUBLIC-SCHOOLHOUSING AUTHORITY**.

**SCOPE OF ASSIGNMENT**—The scope of the application of an identified assignment made to a staff member. The three categories of scope of assignment are (1) systemwide, (2) more than one school or supporting services facility but less than systemwide, and (3) single school or supporting services facility. (IV)

**SCRAP VALUE**—See **SALVAGE VALUE**.

**SEA**—See **STATE EDUCATION AGENCY**.

**SECONDARY ECONOMIC ACTIVITIES**—Production through alteration, processing, and finishing of original materials. Typified by manufacturing, construction, and certain utilities. (See Appendix 5, Standard Industrial Classification.) (Unpublished VIII)

**SECONDARY INSTRUCTIONAL LEVEL**—The general level of instruction provided for pupils in secondary schools and any instruction of a comparable nature and difficulty provided for adults and youth beyond the age of compulsory school attendance. (IV, V-VI) See also **SECONDARY SCHOOL**.

**SECONDARY SCHOOL**—A school comprising any span of grades beginning with the next grade following an elementary or middle school and ending with or below grade 12. (I, II, III-IV, V-VI, IIR, IVR, VR)

**SECONDARY SCHOOL PLANT**—A plant that houses on a permanent basis one school only—a school comprised of any span of grades beginning with the next grade following elementary school and ending with or below grade 12, including junior high schools, the different types of high schools, and vocational or trade high schools. (III)

**SECURITIES**—Bonds, notes, mortgages, or other forms

of negotiable or non-negotiable instruments. (II, IIR)

**SECURITY SERVICES**—Activities concerned with maintaining order and safety in school buildings at all times, on the grounds, and in the vicinity of schools. Included are police activities for school functions and traffic control on grounds and in the vicinity of schools. (IIR, IVR)

**SEGREGATION**—A selection process by which homogeneous units become grouped together to form clusters. (Unpublished VIII)

**SELF-CONTAINED CLASS**—A class having the same teacher or team of teachers for all or most of the daily session. (IV, V, VI, VII-VR)

**SELF-DIRECTED LEARNING**—A systematic process in which an individual takes responsibility, in collaboration with others, for diagnosing his own learning needs, formulating his learning objectives, planning and engaging in a sequence of learning experiences to achieve these objectives, and evaluating progress toward these objectives. (Unpublished IX)

**SEMESTER**—Half of a regular school term, usually 16 to 18 weeks in duration. (V, VI, IVR)

**SEMESTER CREDIT HOUR**—A unit of measure frequently used in higher education, denoting class meetings for one hour a week for an academic semester, generally about eighteen weeks time. Satisfactory completion of a course scheduled for 3 class sessions (or the equivalent) per week in an academic semester earns 3 semester hours. (IV-VI-VII-IVR)

**SEMI-FIRE RESISTIVE BUILDING**—A building with fire-resistive exterior and bearing walls and fire-resistive corridor and stairway walls, floors, and ceilings, but with ordinary construction otherwise, such as combustible floors, partitions, roofs, and finish. (III)

**SEMI-SKILLED LABOR**—An arbitrary classification that requires less training (as for a few weeks) and demands the exercise of less independent judgment than skilled labor and more than unskilled labor. (Unpublished VIII)

**SENIOR HIGH SCHOOL**—A secondary school offering the final years of high school work necessary for graduation and invariably preceded by a junior high school. (I, II, III-IV, V, VI, IIR, IVR, VR)

**SEPARATION**—The severance of the employment relationship between the staff member and the LEA. (IVR)

**SEPARATION BY DEATH**—Separation resulting from death of a staff member. (IVR)

**SEPARATION BY MUTUAL AGREEMENT**—Separation resulting from a decision arrived at jointly by both the staff member and the LEA. (IVR)

**SEQUENCE**—The order of presentation of aspects of the instructional program, as within a grade, a course, or a series of grades or courses. (VI)

**SEQUENTIAL STUDY**—A plan for the logical ordering of the presentation of various aspects of content and learning experiences, whether among a series of schools, among a series of grades or courses, or within a grade or course. (VI)

**SERIAL BONDS**—Issues redeemable by installments, each of which is to be paid in full, ordinarily out of revenues of the fiscal year in which it matures, or revenues of the preceding year. (II, IIR)

**SERIOUSLY EMOTIONALLY DISTURBED**—Individuals identified by professionally qualified personnel as having an emotional handicap of such a nature and severity as to require one or more special services, whether or not such services are available. Such services—for conditions such as autism, schizophrenia, and other psychotic conditions—include but are not limited to institutional care, other professional treatment or care, and instruction in special classes on a full-time or part-time basis. (V-VR)

**SERVICE**—Those activities which provide some support benefit to another person, agency, or institution. (VII, IVR)

**SERVICE AREA**—A division of an LEA's operation consisting of activities which, regardless of their nature, have the same general operational objective. It is the third level of *function*. (IV, IIR, IVR)

**SERVICE AREA DIRECTION**—Pertains to directing and managing the Service Area of any function. It includes activities of all those engaged in managing and directing a given area. (IIR, IVR)

**SERVICE CLUB**—An organized group of members

having as their common purpose working for the benefit of others voluntarily, by request or to fulfill a social need. (Unpublished VIII)

**SERVICE INDUSTRIES** (subject matter)—See appendix, p. 205.

**SERVICES, ANCILLARY**—See ANCILLARY SERVICES.

**SERVICES, ATTENDANCE**—See ATTENDANCE SERVICES.

**SERVICES, AUDIOLOGY**—See AUDIOLOGY SERVICES.

**SERVICES, AUDIOVISUAL**—See AUDIOVISUAL SERVICES.

**SERVICES, AUDIT**—See AUDIT SERVICES.

**SERVICES, BOARD OF EDUCATION**—See BOARD OF EDUCATION SERVICES.

**SERVICES, BOARD SECRETARY**—See BOARD SECRETARY SERVICES.

**SERVICES, BOARD TREASURER**—See BOARD TREASURER SERVICES.

**SERVICES, BUDGETING**—See BUDGETING SERVICES.

**SERVICES, BUILDING ACQUISITION, CONSTRUCTION, AND IMPROVEMENT**—See BUILDING ACQUISITION, CONSTRUCTION, AND IMPROVEMENT SERVICES.

**SERVICES, BUSINESS SUPPORT**—See BUSINESS SUPPORT SERVICES.

**SERVICES, CARE AND UPKEEP OF BUILDING**—See CARE AND UPKEEP OF BUILDINGS SERVICES.

**SERVICES, CARE AND UPKEEP OF EQUIPMENT**—See CARE AND UPKEEP OF EQUIPMENT SERVICES.

**SERVICES, CARE AND UPKEEP OF GROUNDS**—See CARE AND UPKEEP OF GROUNDS SERVICES.

SERVICES, COMMUNITY--See COMMUNITY SERVICES.

SERVICES, COMPUTER-ASSISTED INSTRUCTION--See COMPUTER-ASSISTED INSTRUCTION SERVICES.

SERVICES, CONTRACTED--See CONTRACTED SERVICES.

SERVICES, COUNSELING--See COUNSELING SERVICES.

SERVICES, DATA PROCESSING--See DATA PROCESSING SERVICES.

SERVICES, DENTAL--See DENTAL SERVICES.

SERVICES, DIRECT--See DIRECT SERVICES.

SERVICES, EDUCATIONAL MEDIA--See EDUCATIONAL MEDIA SERVICES.

SERVICES, EDUCATIONAL SPECIFICATIONS DEVELOPMENT--See EDUCATIONAL SPECIFICATIONS DEVELOPMENT SERVICES.

SERVICES, EDUCATIONAL TELEVISION--See EDUCATIONAL TELEVISION SERVICES.

SERVICES, EVALUATION--See EVALUATION SERVICES.

SERVICES, EXECUTIVE ADMINISTRATION--See EXECUTIVE ADMINISTRATION SERVICES.

SERVICES, EXTERNAL--See EXTERNAL SERVICES.

SERVICES, FACILITIES ACQUISITION AND CONSTRUCTION--See FACILITIES ACQUISITION AND CONSTRUCTION SERVICES.

SERVICES, FINANCIAL ACCOUNTING--See FINANCIAL ACCOUNTING SERVICES.

SERVICES, FISCAL--See FISCAL SERVICES.

SERVICES, FOOD--See FOOD SERVICES.

SERVICES, FOOD PREPARATION AND DISPENSING--See FOOD PREPARATION AND DISPENSING SERVICES.

SERVICES, GUIDANCE--See GUIDANCE SERVICES.

SERVICES, HELPING-TEACHER--See HELPING-TEACHER SERVICES.

SERVICES, IMPROVEMENT OF INSTRUCTION--See IMPROVEMENT OF INSTRUCTION SERVICES.

SERVICES, INDIRECT--See INDIRECT SERVICES.

SERVICES, INFORMATION--See INFORMATION SERVICES.

SERVICES, INSTRUCTION AND CURRICULUM DEVELOPMENT--See INSTRUCTION AND CURRICULUM DEVELOPMENT SERVICES.

SERVICES, INSTRUCTIONAL STAFF TRAINING--See INSTRUCTIONAL STAFF TRAINING SERVICES.

SERVICES, INTERNAL AUDITING--See INTERNAL AUDITING SERVICES.

SERVICES, INTERNAL INFORMATION--See INTERNAL INFORMATION SERVICES.

SERVICES, LAND ACQUISITION AND DEVELOPMENT--See LAND ACQUISITION AND DEVELOPMENT SERVICES.

SERVICES, LEGAL--See LEGAL SERVICES.

SERVICES, MANAGEMENT INFORMATION--See MANAGEMENT INFORMATION SERVICES.

SERVICES, MEDICAL--See MEDICAL SERVICES.

SERVICES, MONITORING--See MONITORING SERVICES.

SERVICES, NONPUBLIC SCHOOL PUPIL--See NONPUBLIC SCHOOL PUPIL SERVICES.

SERVICES, NURSE--See NURSE SERVICES.

SERVICES, OFFICE OF THE PRINCIPAL--See OFFICE OF THE PRINCIPAL SERVICES.

SERVICES, OFFICE OF THE SUPERINTENDENT--See OFFICE OF THE SUPERINTENDENT SERVICES.



- SERVICES, OPERATION AND MAINTENANCE OF PLANT—See OPERATION AND MAINTENANCE OF PLANT SERVICES.
- SERVICES, OPERATIONS—See OPERATIONS SERVICES.
- SERVICES, PAYROLL—See PAYROLL SERVICES.
- SERVICES, PLACEMENT—See PLACEMENT SERVICES.
- SERVICES, PLANNING—See PLANNING SERVICES.
- SERVICES, PLANNING, RESEARCH, DEVELOPMENT, AND EVALUATION—See PLANNING, RESEARCH, DEVELOPMENT, AND EVALUATION SERVICES.
- SERVICES, PRINTING, PUBLISHING, AND DUPLICATING—See PRINTING, PUBLISHING, AND DUPLICATING SERVICES.
- SERVICES, PROFESSIONAL AND TECHNICAL—See PROFESSIONAL AND TECHNICAL SERVICES.
- SERVICES, PROGRAMING—See PROGRAMING SERVICES.
- SERVICES, PROPERTY ACCOUNTING—See PROPERTY ACCOUNTING SERVICES.
- SERVICES, PSYCHOLOGICAL—See PSYCHOLOGICAL SERVICES.
- SERVICES, PSYCHOLOGICAL COUNSELING—See PSYCHOLOGICAL COUNSELING SERVICES.
- SERVICES, PSYCHOLOGICAL TESTING—See PSYCHOLOGICAL TESTING SERVICES.
- SERVICES, PSYCHOTHERAPY—See PSYCHOTHERAPY SERVICES.
- SERVICES, PUBLIC INFORMATION—See PUBLIC INFORMATION SERVICES.
- SERVICES, PUBLIC LIBRARY—See PUBLIC LIBRARY SERVICES.
- SERVICES, PUBLIC UTILITY—See PUBLIC UTILITY SERVICES.
- SERVICES, PUPIL ACCOUNTING—See PUPIL ACCOUNTING SERVICES.
- SERVICES, PUPIL APPRAISAL—See PUPIL APPRAISAL SERVICES.
- SERVICES, PUPIL PERSONNEL—See PUPIL PERSONNEL SERVICES.
- SERVICES, PUPIL TRANSPORTATION—See PUPIL TRANSPORTATION SERVICES.
- SERVICES, PURCHASED—See PURCHASED SERVICES.
- SERVICES, PURCHASING—See PURCHASING SERVICES.
- SERVICES, RECEIVING AND DISBURSING—See RECEIVING AND DISBURSING SERVICES.
- SERVICES, RECORDS MAINTENANCE—See RECORDS MAINTENANCE SERVICES.
- SERVICES, RESEARCH—See RESEARCH SERVICES.
- SERVICES, SCHOOL LIBRARY—See SCHOOL LIBRARY SERVICES.
- SERVICES, SECURITY—See SECURITY SERVICES.
- SERVICES, SHARED—See SHARED SERVICES.
- SERVICES, SOCIAL WORK—See SOCIAL WORK SERVICES.
- SERVICES, SPEECH PATHOLOGY—See SPEECH PATHOLOGY SERVICES.
- SERVICES, SPEECH PATHOLOGY AND AUDIOLOGY—See SPEECH PATHOLOGY AND AUDIOLOGY SERVICES.
- SERVICES, STAFF—See STAFF SERVICES.
- SERVICES, STAFF RELATIONS AND NEGOTIATION—See STAFF RELATIONS AND NEGOTIATION SERVICES.
- SERVICES, STATE AND FEDERAL RELATIONS—See STATE AND FEDERAL RELATIONS SERVICES.

**SERVICES, STATISTICAL**—See **STATISTICAL SERVICES**.

**SERVICES, STATISTICAL ANALYSIS**—See **STATISTICAL ANALYSIS SERVICES**.

**SERVICES, STATISTICAL REPORTING**—See **STATISTICAL REPORTING SERVICES**.

**SERVICES, SUPPORTING**—See **SUPPORTING SERVICES**.

**SERVICES, VEHICLE SERVICING AND MAINTENANCE**—See **VEHICLE SERVICING AND MAINTENANCE SERVICES**.

**SERVICES, VOLUNTEERED**—See **VOLUNTEERED SERVICES**.

**SERVICES, WAREHOUSING AND DISTRIBUTING**—See **WAREHOUSING AND DISTRIBUTING SERVICES**.

**SESSION**—The period of time during the schoolday when a given group of students is under the guidance and direction of teachers. (IV, V, VI, VR) See also **FULL-DAY SESSION** and **HALF-DAY SESSION**.

**SEVERELY MENTALLY RETARDED**—Mentally retarded individuals for whom neither self-support nor significant improvement in performance is anticipated. (VI, VR)

**SEX RATIO**—In the United States, the number of males per 100 females within a specified population. (Unpublished VIII)

**SHARED FACILITIES**—Either public school buildings, sites, or equipment regularly used without rental fee by nonpublic school pupils who are under the immediate supervision and control of nonpublic school officials, or nonpublic school buildings, sites, or equipment regularly used without rental fee by public school pupils who are under the immediate supervision and control of public school officials. (VI)

**SHARED REVENUE**—Revenue which is levied by one governmental unit but shared, usually in proportion to the amount collected, with another unit of government or class of governments. (IIR, IVR)

**SHARED SERVICES**—An arrangement whereby serv-

ices provided by one school or school system are made available without charge to another school or school system. To illustrate, the health services or school library services of a given public school might be made available without charge to pupils of a neighboring nonpublic school on a set schedule or as required, with persons providing such services being staff members of the public school, regardless of the location at which the services are provided. (VI)

**SHARED TAX**—See **SHARED REVENUE**.

**SHARED TIME**—See **DUAL ENROLLMENT**.

**SHELTERED WORKSHOP**—An enterprise, usually nonprofit, providing remunerative employment and/or rehabilitative activity under appropriate supervision and direction for workers having one or more handicapping conditions—physical, mental, or emotional—of such degree that normal competitive employment is unsuitable or unavailable. (VI)

**SHOP ROOM**—A special instructional space designed or provided with special built-in equipment, for developing manipulative and related skills. The type of shop room should be specified. (III-VI) See also **SPECIAL CLASSROOM**.

**SHORTHAND, STENOGRAPHIC, AND SECRETARIAL (subject matter)**—See appendix, p. 160.

**SHORT-TERM LOANS**—A loan payable in 5 years or less, but not before the end of the current fiscal year. (II, IIR) See also **CURRENT LOANS**.

**SHOWER ROOM**—A room designed as such and equipped with individual shower stalls or group showers. It may also contain drying areas, towel storage and issue areas, dressing and locker areas, lavatory areas, and service toilet areas. (III)

**SICK LEAVE**—Leave permitted staff members for illness. (IV-IVR)

**SINGLE FUND ACCOUNTING (State education agency)**—A budgeting and accounting procedure for the State department of education through which all receipts and expenditures are handled in a single fund. (VII)

**SINGLE SCHOOL**—Activities which extend or apply to only a single attendance area. (IIR, IVR)

**SINKING FUND**—Money which has been set aside or invested for the definite purpose of meeting payments on debt at some future time. It is usually a fund set up for the purpose of accumulating money over a period of years in order to have money available for the redemption of long-term obligations at the date of maturity. (I, II, III, VII, IIR)

**SITE**—A piece of land and all improvements to it other than structures. (III) *See also* SCHOOL SITE.

**SITE ADDITION**—Land acquired and added to a previously-acquired site. (III)

**SKILLED LABOR**—An arbitrary classification that requires workers to have skill and training in a particular occupation, craft, or trade, and full competence in the assigned task. (Unpublished VIII)

**SKILLS**—Abilities acquired by observation, study, or experience in mental and/or physical performance (e.g., proficiency in planning and investigating, operational techniques, comprehension, organization, execution, remembrance, and application of knowledge to acquire a desired result) basic to the mastery of school work or other activity. (VI)

**SLOW LEARNERS**—Students who display evidence of having difficulty in adjusting to the usual curriculum in one or more academic areas, requiring modification of school offerings within the regular classroom in order to attain maximum growth and development. The term should be used in referring to the student's capability in specific academic areas rather than to the student's general level of mental ability. (V-VR)

**SMALL ENGINEER REPAIR (INTERNAL COMBUSTION)** (subject matter)—*See* appendix, p. 264.

**SMALL PUPIL TRANSPORTATION VEHICLE**—Any of the pupil transportation vehicles with a manufacturer's rated seating capacity of fewer than 12. (Seating capacity figured on the basis of at least 13 inches of seat space per pupil.) (I, II-III-IV)

**SOCIAL HANDICAP**—An abnormality or variation in interpersonal relationships that adversely affects the social adjustment of an individual. (V, VI)

**SOCIAL SCIENCES/SOCIAL STUDIES** (subject matter)—*See* appendix, p. 237.

**SOCIAL SECURITY NUMBER**—The number assigned to a person by the Social Security Administration. (IV, IVR-VR)

**SOCIAL WORK**—Activities concerned with the prevention of, or solution to, those personal, social, and emotional problems of individuals which involve such relationships as those of the family, school, and community. (IIR, IVR)

**SOCIAL WORK ASSIGNMENT**—An assignment to assist in the prevention of, or solution to, those personal, social, and emotional problems of individuals which involve such relationships as those of the family, school, and community. (IV, IIR, IVR)

**SOCIAL WORK PERSONNEL**—*See* SOCIAL WORKER.

**SOCIAL WORK SERVICES**—Activities such as investigation and assessment of pupil problems arising from the home, school, or community; casework and group work services for pupils and families; interpreting the problems of pupils for other staff members; and promoting change in the circumstances surrounding the individual pupil which are related to his problem.

**SOCIAL WORKER**—A staff member assigned to perform professional services in assisting in the prevention of or solution to the personal, social, and emotional problems of pupils which involve family, school, and community relationships when such problems have a bearing upon the quality of the school work of the pupil. (IV)

**SOCIALLY AND/OR EMOTIONALLY HANDICAPPED**—Pupils identified by professionally qualified personnel as having a social and/or emotional handicap, e.g., emotionally disturbed and delinquency prone. (VI)

**SOCIALLY MALADJUSTED**—Students identified by professionally qualified personnel as having unusual difficulty or unacceptable behavior in interpersonal relationships to an extent as to require special services. (V, VI-VR)

**SOCIETY**—A group of people with a common and at least somewhat distinct culture who occupy a particular geographic area, have a feeling of unity, and regard themselves as a distinguishable entity. It includes all or most of the basic social institutions required to meet basic human needs and is independent in that it includes all of the organizational forms necessary for its own survival. (Unpublished VIII)

**SOCIOLOGY** (subject matter)—See appendix, p. 245.

**SOFTWARE**—Programing systems, libraries, and other programing and non-hardware operating aids; sometimes extended to include all sales support provided by a computer manufacturer such as training, reference material, and installation planning. (VII)

**SOPHOMORE**—In college, a student who has completed more than the required number of credit hours for completion of the first year of study, but has not completed the requirements for the second year. The term is also used frequently in referring to a high school student in grade 10. (VR)

**SOURCE OF FUNDS**—Identifies the agency, governmental or otherwise, which appropriates the money used by a local school or LEA. (IIR, IVR)

**SPECIAL ASSESSMENT**—A compulsory levy made by a local government against certain properties to defray part or all of the cost of a specific improvement or service which is presumed to be of general benefit to the public and of special benefit to the owners of such properties. (II, IIR)

**SPECIAL CLASS FOR EXCEPTIONAL PUPILS**—A class, composed of exceptional children or of adults identified as exceptional, for whom a program of special education is provided. (V, VI) See also **EXCEPTIONAL CHILDREN** and **SPECIAL EDUCATION**.

**SPECIAL COST CENTERS**—A dimension for accumulating additional details on costs of a segment of an existing cost center or for accumulating costs of a temporary program or project for evaluative purposes. (IIR, IVR) See also **COST CENTER**.

**SPECIAL EDUCATION**—Consists of direct instructional activities designed primarily to deal with the following pupil exceptionalities: (1) physically handicapped; (2) emotionally disturbed; (3) culturally different including compensatory education; (4) mentally retarded; and (5) mentally gifted and talented. The Special Education Services Area includes Preprimary, Elementary, Secondary, Postsecondary, and Adult/Continuing Education. (V, VI, VII-IIR, IVR)

**SPECIAL EDUCATION CLASSES**—Classes organized for the particular purpose of providing instruction to exceptional children. (III)

**SPECIAL FUND**—Any fund other than the general fund. (II, IIR)

**SPECIAL INSTRUCTION ROOM**—A room or suite of rooms provided with special equipment and used for specialized learning activities such as kindergarten rooms, laboratories, and shop. (I)

**SPECIAL INSTRUCTIONAL SPACE FOR EXCEPTIONAL CHILDREN**—An instructional space designed, or provided with special built-in equipment, specifically for accommodating classes organized for the particular purpose of providing instruction to exceptional children, e.g., classrooms for pupils who are visually handicapped, hearing handicapped, or crippled. (III-VI) See also **EXCEPTIONAL CHILDREN**.

**SPECIAL INSTRUCTIONAL SPACES**—Instructional spaces designed, or provided with special built-in equipment, for specialized learning activities, e.g., kindergarten rooms, laboratories, and shops. (III-VI)

**SPECIAL PHYSICAL HEALTH PROBLEMS**—A term referring to pupils identified by professionally qualified personnel as having less than the usual amount of strength, energy, and endurance and hence may need appropriate modifications in their educational program. Such a condition might result from chronic illness, emotional disturbance, or environmental causes, e.g., diabetes, cardiac disease, grief reaction, epilepsy, and lead poisoning. (V) See also **PHYSICAL HANDICAP**.

**SPECIAL PROGRAMS**—Instructional activities designed primarily to deal with pupil exceptionalities. The Special Program Service Area includes preprimary, elementary, and secondary services for the (1) gifted and talented; (2) mentally retarded; (3) physically handicapped; (4) socially and/or emotionally handicapped; (5) culturally disadvantaged; (6) pupils with learning disabilities; and (7) other special programs. (IIR, IVR)

**SPECIAL PURPOSE DISTRICT**—An area designated by a State or local government to develop and operate facilities and services for a particular need or activity. Examples of special purpose districts are those for parks, water, fire, soil conservation, or vocational education. (Unpublished VIII)

**SPECIAL PURPOSE GROUPS**—See **INTEREST GROUP**.

**SPECIAL REVENUE FUND**—Used to account for money appropriated or granted for special purposes. Uses and limitations are specified by the legal authority establishing the Fund and, generally, the resources of this Fund cannot be diverted to other uses. (IIR)

**SPECIAL SCHOOL**—See **SCHOOL FOR EXCEPTIONAL CHILDREN**.

**SPECIAL STUDENT SERVICES RECORD**—Confidential information originating as reports written by student services workers of the local education agency for the express use of other professionals within the agency, including systematically gathered teacher or counselor observations, verified reports of serious or recurrent behavior problems, and selected health data. (Normally, special student services records are maintained separately from the cumulative student record.) (VR) See also **CUMULATIVE STUDENT RECORD** and **CONFIDENTIAL REPORTS FROM OUTSIDE AGENCIES**.

**SPECIAL YOUTH PROJECT**—A project providing guidance, counseling, testing, basic education, basic work skills, social adjustment, occupational training, or other appropriate instruction or services to meet the needs of youths, 16 years of age or older who because of inadequate educational background and work preparation are unable to qualify for and obtain employment without such training or education. (VI)

**SPEECH (subject matter)**—See appendix, p. 179.

**SPEECH AND HEARING SPECIALIST**—A staff member performing such specialized activities as assisting in the identification of speech and hearing handicaps of children, planning and conducting special programs and services for speech and hearing handicapped children (exclusive of the deaf); counseling school personnel, parents, and children concerning problems related to speech and hearing impairment; and cooperating with persons in related disciplines and community services. (IV)

**SPEECH DISCRIMINATION TEST (AIDED)**—A standardized test to measure the ability to discriminate between speech sounds, with the use of a hearing aid. (VR)

**SPEECH DISCRIMINATION TEST (UNAIDED)**—A standardized test to measure ability to discriminate between speech sounds, without the use of hearing aids. (VR)

**SPEECH HANDICAP**—See **SPEECH HANDICAPPED**.

**SPEECH HANDICAPPED**—Individuals with markedly impaired speech. (VR) See also **IMPAIRED ARTICULATION**; **STUTTERING**; and **VOICE IMPAIRMENT**.

**SPEECH IMPAIRED**—Individuals with an impairment in speech and/or language (including impaired articulation, stuttering, voice impairment, and a receptive or expressive verbal language handicap) that is sufficiently severe to adversely affect the individual's performance in the usual school program. Where used for reporting purposes, the term speech impaired often encompasses both the speech handicapped and the language handicapped. (V-VR) See also **COMMUNICATION DISORDER**.

**SPEECH PATHOLOGIST**—A specialist in communicative disorders, including the scientific study and management of speech, hearing, and language disabilities. The primary responsibilities of the speech pathologist are of a clinical nature which involves diagnostic, evaluative, and therapeutic activities in the area of speech disabilities. (IV)

**SPEECH PATHOLOGY AND AUDIOLOGY SERVICES**—Activities which have as their purpose the identification, assessment, and treatment of pupils with impairments in speech, hearing, and language. (IVR)

**SPEECH PATHOLOGY SERVICES**—Activities organized for the identification of pupils with speech and language disorders; diagnosis and appraisal of specific speech and language disorders; referral for medical or other professional attention necessary to the habilitation of speech and language disorders; provision of required speech habilitation services; and counseling and guidance of pupils, parents, and teachers, as appropriate. (VI-IVR)

**SPONSOR (for overseas dependents' schools of the U.S. Department of Defense)**—The member of the U.S. Department of Defense (military or civilian) having parental or guardianship responsibility for the student, or assuming legal responsibility for the student while in the dependents' school. (VR)

**STADIUM**—A permanent structure consisting of one or more units with tiers of seats for spectators at athletic contests. (III)

**STAFF ACCOUNTING**—Services rendered in connec-

tion with the systematic recording, filing, and storing of information related to staff members employed by the LEA. (IV-VII-IVR, IVR)

**STAFF ASSIGNMENT WORKLOAD**--Data about the factors used in measuring a staff member's efforts in fulfilling an assignment, including the type of activity, the unit of work, and the time involved in the task. These data elements are used in making decisions regarding the number of staff members needed for a particular task or job; e.g., the number of counselors needed for elementary pupils, the number of teacher aids needed for elementary pupils, the number of teacher aides needed in a particular program area, the number of painters needed to keep facilities protected from weather. (IVR)

**STAFF MEMBER**--A person whose relationship with the local education agency meets the following criteria:

- The person performs activities or provides services for the local education agency which are under the direction or control of the agency's governing authority.
- The person is either compensated for such services by the LEA and is considered an employee for the purpose of workmen's compensation coverage, the Federal Insurance Contribution Act (FICA), and wage or salary tax withholdings; or the person performs such services on a volunteer, uncompensated basis. (The LEA should collect the same data--depending upon the assignment--about every employee, whether paid or unpaid.) (IV-VII-IVR)

**STAFF MEMBER-PUPIL RATIO**--A fraction obtained by dividing the number of pupils in membership by the number representing the full-time equivalency of staff members involved in any particular activity or group of activities as of a particular date. (IVR)

**STAFF RELATIONS AND NEGOTIATION SERVICES**--Activities concerned with staff relations system-wide and the responsibilities for contractual negotiations with both instructional and noninstructional personnel. (IVR)

**STAFF RETENTION RATE**--The rate, expressed as a percentage, at which employees of an LEA remain employed from one period of time to the next, such as from year to year. (IV-IVR)

**STAFF SEPARATION RATE**--The rate, expressed as a percentage, at which employees leave the employment of an LEA during a period of time, usually a year. (IV-IVR)

**STAFF SERVICES**--The activities concerned with recruiting, accounting, placing, transferring, and training staff employed by an LEA. (IVR, IVR)

**STAGGERED SESSIONS**--See EXTENDED-DAY SESSIONS.

**STANDARD INDUSTRIAL CLASSIFICATION**--A formal system in official use in the United States for classifying all economic activities. Provides consistency and scale, through a series of progressively more detailed levels (one, two, three, and four digits). (Unpublished VIII)

**STANDARD LAND USE CODING SYSTEM**--A coding system which makes possible the standardization of land use record keeping and mapping, developed by the U.S. Urban Renewal Administration and the U.S. Bureau of Public Roads. (Unpublished VIII)

**STANDARD METROPOLITAN STATISTICAL AREA**--A term used by the Bureau of the Census to designate large urban areas--The primary criteria include: (1) a county containing a central city of 50,000 or more people or twin cities with a combined population in excess of 50,000; (2) additional contiguous counties may be included if they are functionally integrated with the central county. Such counties may be across State lines from the State containing the central county. (Unpublished VIII)

**STANDARD ROUTING PATTERNS**--School bus routes established on the basis of student residence distribution and the street pattern for regular school-day pick-up and return. (Unpublished VIII)

**STANDARD TERMINOLOGY**--Items of information (terms)--understood, accepted, and used nationwide--possessing the qualities of combinability, comparability, relatability, and discreteness in classification and definition. (VII, IVR)

**STANDARDIZED TEST**--A test composed of a systematic sampling of behavior, having data on reliability and validity, administered and scored according to specific instructions, and capable of being interpreted in terms of adequate norms. (V, VI, VR)

**STATE**—A term that applies to the 50 States, outlying areas, the Trust Territory of the Pacific Islands, and the District of Columbia. (V-VII)

**STATE AID FOR EDUCATION**—Any grant made by a State government for the support of education. (II-VII, III, IVR) *See also* PUBLIC GRANT.

**STATE AND FEDERAL RELATIONS SERVICES**—Activities associated with developing and maintaining good relationships with State and Federal officials. (IVR)

**STATE BOARD OF EDUCATION**—The legally constituted body having the major responsibility for the general supervision of elementary and secondary education in the State. This board may also have total or partial responsibility for the supervision of higher education. (I-VII; IVR)

**STATE DEPARTMENT OF EDUCATION**—An organization, composed of the chief executive officer (chief State school officer) and staff; that exists to conduct the work delegated to it by law. (I-VI-VII, IVR)

**STATE ECONOMIC AREA**—A relatively homogeneous subdivision of a State, consisting of a single county or a group of counties and having certain economic and social characteristics which distinguish it from adjoining areas. The larger standard metropolitan statistical areas (those in 1960 with a central city of 50,000 or more and a total population of 100,000 or more) are recognized as metropolitan state economic areas. (Unpublished VIII)

**STATE EDUCATION AGENCY**—The organization established by law for the primary purpose of carrying out at least a part of the educational responsibilities of the State. It is characterized by having statewide jurisdiction and may be composed of a State board, chief executive officer, and staff. Some State education agencies may lack one or two of these three elements, but in any case there must be either a board or a chief executive officer. The term "commission" is sometimes used synonymously with "board." (I, IV-VII, IVR)

**STATE EDUCATION AUTHORITY**—An organized and officially constituted group of individuals or an individual responsible for policy decisions related to constitutional and legislative provisions pertinent to education in the State. (VII)

**STATE HIGHWAYS**—All roads whose construction was primarily financed by the State. Such roads are maintained by the State. (Unpublished VIII)

**STATE OPERATED**—A term applying to any program, school, or other institution operated by a State agency. (VII, IVR)

**STATE SYSTEM OF EDUCATION**—The system which encompasses all educational activities within a State. (VII)

**STATE VOCATIONAL EDUCATION PLAN (STATE PLAN)**—A written description of the State's vocational education programs submitted to and approved by the U.S. Commissioner of Education as a condition for the allotment of Federal funds. It sets forth the State's authority under State law for its administration of such programs and includes the policies to be followed by the State in maintaining, extending, and improving existing vocational education programs, and in developing new programs. (VI)

**STATIONARY ENERGY SOURCES OCCUPATIONS (subject matter)**—*See* appendix, p. 264.

**STATISTICAL ANALYSIS SERVICES**—Activities concerned with determining the nature and relationships of data elements to arrive at conclusions and recommendations. This data element includes institutional, management, and program studies on topics such as cost/effectiveness, space utilization, and teaching load. (IVR)

**STATISTICAL REPORTING SERVICES**—Activities concerned with assimilating and narrating statistical data into reports for further use. This data element includes preparation of reports, such as questionnaires and data collection forms, for internal as well as external use. (IVR)

**STATISTICAL SERVICES**—Services concerned with collecting, organizing, summarizing, analyzing, and disseminating educational data pertinent to various educational interests, including pupils, staff, instruction, facilities, and finance. (VI-VII, IIR, IVR)

**STATISTICIAN**—A staff member employed in the area of statistical services; an expert or specialist in statistics, a person who assembles, classifies, and tabulates statistical data. (VII)

**STATISTICIAN ASSIGNMENT**—An assignment, to plan surveys and collect, summarize, and interpret numerical data, applying statistical theory and methods. (IVR)

**STENOGRAPHIC, SECRETARIAL, AND RELATED OCCUPATIONS** (subject matter)—See appendix, p. 235.

**STORAGE ROOM**—Any room designed, or adapted, for use in receiving or storing supplies and equipment that is not an integral part of, or adjunct to, another functional or service area. (III)

**STORES**—Supplies, materials, and equipment in store rooms subject to requisition. (II, III, IV-IIB-VII-IIR)

**STORES HANDLING ASSIGNMENT**—An assignment to perform the activities of receiving, storing, and dispensing school supplies, materials, and equipment. (IV, IIR, IVR)

**STORY**—A group of rooms on the same floor or level, or a floor consisting of one room having clear standing head room of at least 6 feet 6 inches and whose floor is at or above grade level along at least one entire side. "At or above grade level" means that if the horizontal plane of the floor were to be extended on the side in question, no land within twenty feet of the building would be above this plane. (III)

**STUDENT**—An individual for whom instruction is provided in an educational program under the jurisdiction of a school, school system, or other educational institution. No distinction is made between the terms "student" and "pupil"; the term "student" is used to include individuals at all instructional levels. A student may receive instruction in a school facility or in another location, such as at home or in a hospital. Instruction may be provided by direct student-teacher interaction or by some other approved medium such as television, radio, telephone, and correspondence. (IV, V, VII-IVR-VR)

**STUDENT ACCOUNTING**—A system for collecting, computing, and reporting information about students. (V, VII, IIR, IVR, VR)

**STUDENT-ADMINISTRATIVE STAFF RATIO** (as of a given date)—The number of students in membership, as of a given date, divided by the number representing the total full-time equivalency of principal assignments,

assistant principal assignments, central administrative staff assignments (including area administrators and their staffs), and assignments for supervising, managing, and directing academic departments in the schools serving these students on the same date. (VR)

**STUDENT BODY ACTIVITIES**—Cocurricular activities for students—such as entertainment, publications, and clubs—that are managed or operated by students under the guidance or supervision of staff members. (II-IV-V-VI-IIR, IVR-VR) See also **COCURRICULAR ACTIVITIES**.

**STUDENT CAPACITY OF A SCHOOL PLANT**—The membership that can be accommodated in the classrooms and other instruction areas of a given school plant for the schoolday according to existing State-approved standards, exclusive of multiple sessions. (III, V, VI, VR)

**STUDENT COMMONS AREA**—An area designed, or adapted, for use by students for activities such as relaxation, lounging, unsupervised reading, and purchasing of supplies and refreshments. (III)

**STUDENT-COUNSELOR RATIO** (as of a given date)—The number of students in membership, as of a given date, divided by the number representing the total full-time equivalency of counseling assignments serving these students on the same date. (IV, V, V', VR)

**STUDENT-COUNSELOR RATIO** (for a period of time)—The average daily membership of students, for a given period of time, divided by the number representing the total full-time equivalency of counseling assignments serving these students during the same period. (V, VI, VR)

**STUDENT DORMITORY**—A building that is used primarily as living quarters for groups of students. (III)

**STUDENT-INSTRUCTIONAL STAFF RATIO** (for a period of time)—The average daily membership of students, for a given period of time, divided by the number representing the total full-time equivalency of teaching assignments, teaching assistant assignments, teaching intern assignments, teacher aide assignments, and student teaching assignments serving these students during the same period. (VR) See also **STUDENT-PROFESSIONAL EDUCATIONAL STAFF RATIO** and **STUDENT-TEACHER RATIO**.



**STUDENT-LIBRARY SERVICES STAFF RATIO** (as of a given date)—The number of students in membership, as of a given date, divided by the number representing the total full-time equivalency of library services staff assignments serving these students on the same date. (VR)

**STUDENT NUMBER**—The number assigned to the student for identification and recordkeeping purposes. Normally only one number need be used for identification. (VR)

**STUDENT ORGANIZATION**—A group of pupils organized into a single body for the purpose of pursuing common goals and objectives. Such organizations include the various types of clubs and class organizations which, with the approval of appropriate school authorities, are managed and operated by pupils under the guidance or supervision of qualified adults. (V, VI) See also **STUDENT BODY ACTIVITIES**.

**STUDENT ORGANIZATION** (class or grade)—An organized group of pupils who, by virtue of having completed a designated number of grades or school years, pursue common goals and objectives. Such organizations include the senior, junior, sophomore, and freshman classes, and the elementary school grades. They are managed and operated by pupils under the guidance or supervision of appropriate staff members. (V, VI)

**STUDENT ORGANIZATION** (club)—An organized group of pupils having as its main objective the furtherance of a common-interest. Such organizations include social, hobby, instructional, recreational, athletic, honor, dramatic, musical, and similar clubs and societies which, with the approval of appropriate school authorities, are managed and operated by the pupils under the guidance or supervision of qualified adults. (VI)

**STUDENT-PROFESSIONAL EDUCATIONAL STAFF RATIO** (as of a given date)—The number of students in membership in a school system, as of a given date, divided by the number representing the total full-time equivalency of all professional educational assignments in the school system on the same date. (IV-V, VI, VR)

**STUDENT-PROFESSIONAL EDUCATIONAL STAFF RATIO** (for a period of time)—The average daily membership of students, for a given period of time, divided by the number representing the total full-time

equivalency of all professional educational assignments in the school system during the same period. (V, VI, VR)

**STUDENT-PSYCHOLOGIST RATIO** (as of a given date)—The number of students in membership in a school system, as of a given date, divided by the number representing the total full-time equivalency of psychologist assignments serving these students on the same date. (VR)

**STUDENT-PSYCHOLOGIST RATIO** (for a period of time)—The average daily membership of students for a given period of time, divided by the number representing the total full-time equivalency of psychologist assignments serving these students during the same period. (VR)

**STUDENT RECORD**—Information about one or more students which is kept on file for a period of time in a classroom, school office, system office, or other approved location. A student record usually is intended for the use of the person or office which maintains the record. (V, VR) See also **CUMULATIVE STUDENT RECORD** and **PERMANENT STUDENT RECORD**.

**STUDENT-SCHOOL ADMINISTRATOR RATIO** (as of a given date)—The number of students in membership, as of a given date, divided by the number representing the total full-time equivalency of principal assignments, assistant principal assignments, and assignments for supervising, managing, and directing academic departments in the school(s) serving these students on the same date. (VR)

**STUDENT-SCHOOL ADMINISTRATOR RATIO** (for a period of time)—The average daily membership of students, for a given period of time, divided by the number representing the total full-time equivalency of principal assignments, assistant principal assignments, and assignments for supervising, managing, and directing academic departments in the school(s) serving these students during the same period. (VR)

**STUDENT-SOCIAL WORKER RATIO** (as of a given date)—The number of students in membership in a school system, as of a given date, divided by the number representing the total full-time equivalency of social work assignments serving these students on the same date. (VR)

**STUDENT-SOCIAL WORKER RATIO** (for a period of time)—The average daily membership of students, for a given period of time, divided by the number representing the total full-time equivalency of social work assignments serving these students during the same period. (VR)

**STUDENT-TEACHER RATIO** (as of a given date)—The number of students in membership, as of a given date, divided by the number representing the total full-time equivalency of teaching assignments serving these students on the same date. (IV-V, VI, VR)

**STUDENT-TEACHER RATIO** (for a period of time)—The average daily membership of students, for a given period of time, divided by the number representing the total full-time equivalency of teaching assignments serving these students during the same period. (V, VI, VR)

**STUDENT TEACHING**—Teaching under the supervision of a certificated teacher as part of a formalized higher education program of teacher preparation. (IVR)

**STUDENT-TOTAL STAFF RATIO** (as of a given date)—The number of students in membership in a school system, as of a given date, divided by the number representing the total full-time equivalency of all staff assignments in the school system on the same date. (IV, V, VI-VR)

**STUDENT-TOTAL STAFF RATIO** (for a period of time)—The average daily membership of students in a school system, for a given period of time, divided by the number representing the total full-time equivalency of all staff assignments in the school system during the same period. (V-VI-VR)

**STUDENTS PER ACRE**—The average daily membership of a school divided by the total number of developed and undeveloped acres in the school site. (III, V, VI, VR)

**STUDY HALL**—An instruction area designed, or adapted, for housing a group of students engaged in individual study of an informal nature of the lessons or assignments received in regular or special classrooms. (III)

**STUTTERING**—Speech often characterized by unusual strain or tension, and by one or more of the following:

repetition, blocking, injection of superfluous speech elements, and/or prolongation on sounds or syllables. ("Stuttering" generally is used synonymously with "stammering," except by some specialists who designate speech repetitions as stuttering and speech blocks or stoppages as stammering.) (VR)

**SUBFUNCTION**—A major division of an LEA's operation consisting of activities which, regardless of their nature, have the same general operational objective. It is the second level of *function*. (IVR)

**SUBJECT**—An organized body of knowledge which may be more comprehensive than a course but is less comprehensive than a subject-matter area. (VI, IVR)

**SUBJECT AREA**—See SUBJECT-MATTER AREA.

**SUBJECT MATTER**—A body of facts, understanding, processes, skills, values, and appreciation related to a specific aspect of human activity and experience. Subject matter includes the accumulated knowledge, skills, appreciations, and attitudes comprising the substance of any subject-matter area. (VI, IVR)

**SUBJECT-MATTER AREA**—A grouping of related subjects or units of subject matter under a heading such as English (language arts), foreign languages, art, music, natural sciences, industrial arts, home economics, agriculture, business, physical education, and trades and industrial occupations. (IV, V-VI, VII-IVR-VR)

**SUBSIDIARY ACCOUNTS**—Related accounts which support in detail the summaries recorded in a controlling account. (II, III-IIB-IIR) See also CLEARING ACCOUNTS.

**SUBSIDIARY JOURNAL**—A journal in which are recorded transactions of like nature. For example, a Cash Journal is a commonly used journal; in it are recorded all cash transactions. (IIB) See also JOURNAL.

**SUBSIDIARY LEDGER**—A ledger containing all the detail accounts which support a particular General Ledger account. (IIB) See also LEDGER and GENERAL LEDGER.

**SUBSTITUTE**—A general term used in reference to an individual who is assigned to take the place of a staff member who is temporarily absent. It is usually used in

more specific manner to indicate such individuals as substitute teacher, substitute bus driver, and substitute custodian. (IV)

**SUBURBANIZATION**—The movement of population and services from large cities to the areas surrounding these cities, with the result that the cities are ringed by an array of suburbs beyond their political limits. (Unpublished VIII)

**SUMMARY ACCOUNT**—An account that is used to consolidate items of a broad category. (IIB) *See also* CONTROL ACCOUNTS.

**SUMMER ADDRESS (staff)**—The place where the staff member resides during the summer recess of school. (IV)

**SUMMER SCHOOL**—The name usually applied to the school session carried on during the period between the end of the regular school term and the beginning of the next regular school term. (I, II, IV, IIR, IVR)

**SUMMER SCHOOL TERM**—That school term which takes place in the summer during the period between the end of one regular school term and the beginning of the next regular school term. (IV, V, VI)

**SUMMER SCHOOL TRANSPORTATION FEES**—Money received for transportation of pupils attending summer school. Separate accounts may be maintained for transportation fees received from patrons, and for transportation fees received from patrons, and for transportation fees received from other LEA's. (IIR)

**SUMMER SCHOOL TUITION**—Money received as tuition for pupils attending summer school classes. Separate accounts may be maintained for tuition received for residents, and for tuition received for nonresidents. (IIR)

**SUMMER TERM - DAY**—A division of the school year which usually begins in June and ends in August and pupils attend the day sessions. (IIR, IVR)

**SUMMER TERM—EVENING**—A division of the school year which usually begins in June and ends in August and pupils attend the evening sessions. (IIR, IVR)

**SUPERINTENDENT ASSIGNMENT**—An assignment to a staff member (e.g., chief executive of schools or chancellor) to perform the highest level, systemwide

executive management functions of an LEA. (IIR, IVR)

**SUPERINTENDENT OF SCHOOLS**—A staff member who is the chief executive officer of a school administrative unit. (I, IV)

**SUPERVISING/MANAGING/DIRECTING ASSIGNMENT**—An assignment to direct staff members and manage a function, a program, or a supporting service. As with all activity assignments, the scope of this assignment is broken into subaccounts. Examples of staff members having this assignment include chairmen of academic departments, supervisors of purchasing, directors and managers of psychological services. (IIR, IVR)

**SUPERVISION ASSIGNMENT**—An assignment to a staff member to provide leadership, guidance, and expertness in a field of specialization for the purpose of improving the performances of staff members. (IV) *See also* HELPING TEACHER.

**SUPERVISOR**—*See* SUPERVISION ASSIGNMENT.

**SUPERVISORS OF INSTRUCTION**—School personnel who have been delegated the responsibility of assisting teachers, in improving the learning situation and instructional methods. (II)

**SUPERVISORY AND ADMINISTRATIVE MANAGEMENT OCCUPATIONS (subject matter)**—*See* appendix, p.235.

**SUPPLEMENTARY PROGRAM**—In vocational education, a program offered as supplemental training to persons already employed. (VI)

**SUPPLY**—A material item of an expendable nature that is consumed, worn out or deteriorated in use; loses its identity through fabrication or incorporation into a different or more complex unit or substance. (I-II, III, VII, IIR, IVR)

**SUPPORT SERVICES**—Activities which provide administrative, technical, and logistical support to a program. "Support services" exist to sustain and enhance the fulfillment of the objectives of other major functions. (III, IV-IIR-IVR)

**SUPPORT SERVICES—BUSINESS ADMINISTRATION**—Activities concerned with purchasing, paying,

transporting, exchanging, and maintaining goods and services for the LEA. Included are the fiscal, acquisition of facilities, operation and maintenance, and internal services for operating all schools. (IIR, IVR)

**SUPPORT SERVICES-CENTRAL ADMINISTRATION**-Activities, other than general administration, which support each of the other instructional and support services programs. These activities include planning, research, development, evaluation, information, staff, statistical, and data processing services. (IIR, IVR)

**SUPPORT SERVICES-GENERAL ADMINISTRATION**-Activities concerned with establishing policy, operating schools and the LEA, and providing the essential facilities and services for the staff and pupils. (IIR, IVR)

**SUPPORT SERVICES-INSTRUCTIONAL STAFF**-Activities associated with assisting the instructional staff in the content and process of providing learning experiences for pupils. (IIR, IVR)

**SUPPORT SERVICES-PUPILS**-Activities which are designed to assess and improve the well-being of pupils and to supplement the teaching process. (IIR, IVR)

**SUPPORT SERVICES-SCHOOL ADMINISTRATION**-Activities concerned with overall administrative responsibility for a single school or a group of schools. (IIR, IVR)

**SUPPORTING SERVICES**-See SUPPORT SERVICES.

**SUPPORTING SERVICES FACILITY**-A piece of land, a building, or part of a building that serves more than one school plant, or is not a part of any given school plant. In some instances, a facility which is definitely part of one school plant may also be used by pupils from another school plant. For example, a high school cafeteria may also be used by pupils from a nearby elementary school plant. Such a facility would not be classified as a supporting services facility, but would be accounted for as part of the school plant with which it is used the major portion of time. (III, IV)

**SUPPORTING SERVICES (State department of education)**-Activities within the State department of education that are not limited to one organizational

unit of the department but rather are departmentwide in scope. (VII)

**SURETY BOND**-A written promise to pay damages or to indemnify against losses caused by the party or parties named in the document, through nonperformance or through defalcation; for example, a surety bond given by a contractor or by an official handling cash or securities. (II, IIR)

**SURPLUS**-The excess of the assets of a fund over its liabilities; or if the fund also has other resources and obligations, the excess of resources over obligations. The term should not be used without a properly descriptive adjective unless its meaning is apparent from the context. (II-IB-VII, IIR)

**SUSPENSION**-Temporary dismissal of a student from school by duly authorized school personnel in accordance with established regulations. (V-VI, VR) See also EXPULSION.

**SYSTEM, ACCOUNTING**-See ACCOUNTING SYSTEM.

**SYSTEM, BUILDING SERVICE**-See BUILDING SERVICE SYSTEM.

**SYSTEM, IMPREST**-See IMPREST SYSTEM.

**SYSTEM, MANAGEMENT INFORMATION**-See MANAGEMENT INFORMATION SYSTEM.

**SYSTEM, MONITORING**-See MONITORING SYSTEM.

**SYSTEM, OUTDOOR SERVICE**-See OUTDOOR SERVICE SYSTEM.

**SYSTEM, PENSION**-See PENSION SYSTEM.

**SYSTEM, PLANNING-PROGRAMING-BUDGETING-EVALUATION**-See PLANNING-PROGRAMING-BUDGETING-EVALUATION SYSTEM.

**SYSTEMS**-Activities or services which provide for an orderly arrangement of data and procedures which will produce any desired interrelationship or summation which may be pertinent to recording or decisionmaking. (VII)

**SYSTEMS ANALYSIS**-Activities involving the search

for and evaluation of alternatives which are relevant to defined objectives, based on judgment, and, wherever possible, on quantitative methods, the development of data processing procedures or application to electronic data processing equipment. (VII, IIR, IVR)

**SYSTEMWIDE**—Activities which extend or apply to all of the schools in the LEA or to all of the schools in the LEA where the activities apply. (IIR, IVR)

**SYSTEMWIDE ASSIGNMENT**—A full-time or less-than-full-time assignment to a staff member consisting of activities which extend or apply to all of the schools in the school system or to all of the schools in the school system at one instructional level where the activities apply. (IV)

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**TABULATING EQUIPMENT OPERATOR**—A staff member assigned duties in connection with the operation of any of the machines such as punches, sorters, and tabulators for automatic tabulation of data by use of a punch card. (IV)

**TALENTED**—Individuals identified by professionally qualified personnel as being capable of high performance in one or more areas of special competence. Among these areas of special competence are creativity; leadership ability and social adeptness; and facility in the productive and performing arts. (V-VR)

**TARDINESS (student)**—Absence of a student at the time a given class and/or half day of attendance begins, provided that the student is in attendance before the close of that class or half day. (V, VR)

**TARGET GROUP**—A group in the population at which programs are aimed or on which programs have a significant impact. (VII) *See also* **DIFFERENTIATED CURRICULUM**.

**TAX ANTICIPATION NOTES**—Notes (sometimes called "warrants") issued in anticipation of collection of taxes, usually retirable only from tax collections, and frequently only from the tax collections anticipated with their issuance. The proceeds of tax anticipation notes or warrants are treated as current loans if paid back from the tax collections anticipated with the issuance of the notes. (II, IIR)

**TAX ASSESSING/COLLECTING ASSIGNMENT**—An assignment to provide services in the assessment of real and personal property for tax computation purposes and in the collection of taxes for the LEA. (IIR, IVR)

**TAX ASSESSMENT AND COLLECTION**—Activities concerned with assigning and recording equitable values to real and personal property, assigning a millage rate (dollars yield per thousand dollars), and receiving yield in a central office. (IIR, IVR)

**TAX ASSESSMENT AND COLLECTION SERVICES**—Activities pertaining to services rendered in connection with tax assessment and collection. (IIR, IVR)

**TAX LIENS RECEIVABLE**—Legal claims against property which have been exercised because of nonpayment of delinquent taxes, interest, and penalties receivable up to the date the lien becomes effective plus the cost of holding the sale. (IIR)

**TAXES**—Compulsory charges levied by a governmental unit for the purpose of financing services performed for the common benefit. The term includes licenses and permits. It does not include special assessments. (II-IIB-IIR) *See also* **SPECIAL ASSESSMENT**.

**TAXES LEVIED FOR OTHER GOVERNMENTAL UNITS**—Taxes levied by a governmental unit as agent for another governmental unit, and which are to be collected, held in trust, and disbursed to the proper unit. They consist of both current and delinquent taxes and may also include tax liens. No allowance for estimated uncollectible taxes is set up against these taxes because the LEA is usually liable only for the amount actually collected. It is recommended that separate accounts be maintained for each interfund receivable. (IIR)

**TAXES RECEIVABLE**—The uncollected portion of taxes which an LEA or governmental unit has levied and which has become due, including any interest or penalties which may be accrued. Separate accounts may be maintained on the basis of tax roll year and/or current and delinquent taxes. (II-IIB-IIR)

**TEACHER**—A person who instructs students. (I, II-IV, V, VI, VII-IIR, IVR)

**TEACHER, CLASSROOM**—*See* **CLASSROOM TEACHER**.

**TEACHER, CRISIS**—See **CRISIS TEACHER**.

**TEACHER, DIAGNOSTIC** See **DIAGNOSTIC TEACHER**.

**TEACHER, NURSE**—See **NURSE-TEACHER**.

**TEACHER AIDE**—A person who assists a teacher with routine activities associated with teaching, those activities requiring minor decisions regarding students, such as monitoring, conducting rote exercises, operating equipment, and clerking. (IV, VI, VII-IIR, IVR)

**TEACHER AIDE ASSIGNMENT**—An assignment to a staff member to perform activities of a nonteaching nature which are not classified as professional educational teaching assignments. (IV)

**TEACHER EDUCATION INSTITUTION**—A university, liberal arts college, teachers' college, or other professional school in which one of the major functions is the preparation of students for the teaching profession and which has been approved for teacher education by a State, regional, or national accrediting body. (V)

**TEACHERAGE**—A building that is used as living quarters for teachers. Individual apartments rented by the school district for teachers are not designated by this term. (III)

**TEACHER-INSTRUCTIONAL SUPERVISOR RATIO**—The total of the full-time equivalencies of all teaching assignments, as of a given date, divided by the total of the full-time equivalencies of all assignments for supervision of instruction as of the same date. (IV-VI)

**TEACHER TRAINING INSTITUTION**—A college or university recognized by the proper State authorities for the training of teachers. (VII)

**TEACHER'S CONTRACT**—The formal agreement, represented by a legal signed document entered into by a teacher and the officials of the school system, stating the salary to be paid the teacher, the length of term of the agreement, and the general duties to be performed by the teacher. (IV)

**TEACHERS OTHER THAN CLASSROOM TEACHERS PER 1,000 PUPILS IN AVERAGE DAILY MEMBERSHIP**—The number representing the

total full-time equivalency of teaching assignments less the number representing the total full-time equivalency of classroom teaching assignments in a school system during a given period of time, multiplied by 1,000 and divided by the average daily membership of pupils during the period. (V, VI)

**TEACHERS PER 1,000 STUDENTS IN AVERAGE DAILY MEMBERSHIP**—The number representing the total full-time equivalency of teaching assignments in a school system during a given period of time, multiplied by 1,000 and divided by the average daily membership of students during this period. (V, VI, VR)

**TEACHERS' ROOM**—A room designed, or adapted, for use by teachers and other instructional staff for study, class preparation, and relaxation. (III)

**TEACHING**—The process of helping pupils acquire knowledge, skills, attitudes, and/or appreciations by means of a systematic method of instruction. (VI)

**TEACHING AIDE ASSIGNMENT**—An assignment to assist a teacher with routine activities associated with teaching those activities requiring minor decisions regarding students, such as monitoring, conducting rote exercises, operating equipment, and clerking. (IIR, IVR)

**TEACHING ASSIGNMENT**—An assignment to a staff member to instruct pupils. (IV, V-IIR, IVR)

**TEACHING ASSISTANT**—A person who performs the day-to-day activities of teaching students under the supervision of a teacher. The teaching assistant does not make any diagnostic or long-range evaluative decisions regarding students taught. The person may or may not be certificated but has completed at least 2 years of formal education preparatory for teaching or the equivalent in experience or training. (IIR, IVR)

**TEACHING ASSISTANT ASSIGNMENT**—An assignment to perform the day-to-day activities of teaching pupils under the supervision of a teacher. The teaching assistant assignment does not include any diagnostic or long range evaluative decisions regarding pupils taught. Staff members having this assignment may or may not be certificated but have completed at least two years of formal education preparatory for teaching or the equivalent in experience or training. (IIR, IVR)

**TEACHING FIELD**—In a departmentalized organiza-

tion, a major subdivision of the educational program such as language arts, foreign languages, mathematics, science, music, vocational education, and physical education. In a nondepartmentalized situation, or in assignments to self-contained classroom duties, the general teaching level such as elementary or secondary may be the most accurate designation of teaching field. (IV)

**TEACHING INTERN**—A person who instructs students without having fulfilled all the requirements for a professional in the teaching field. This person usually has a professional level of competencies in a field other than education and is allowed to teach while obtaining the necessary knowledge and skills in education and/or educational psychology. (IIR, IVR)

**TEACHING INTERN ASSIGNMENT**—An assignment to instruct pupils as part of on-the-job preparation for full certification as a teacher. A teaching intern usually has all the professional education necessary for certification except for skills in the fields of education or educational psychology. (IIR, IVR)

**TEACHING MACHINE**—A device for presenting programmed instruction. (VI) See also **PROGRAMED INSTRUCTION**.

**TEACHING, OTHER THAN CLASSROOM INSTRUCTION RESPONSIBILITY**—The area of responsibility for instructing pupils in other than the usual classroom situation. It consists of such activities as teaching the homebound, teaching through correspondence, teaching through radio or television from a studio, providing instruction for exceptional pupils released from regular classes for short periods of time, and instructing pupils in non-course (cocurricular) activities. (IV)

**TEAM TEACHING**—An organization for classroom instruction which involves two or more teachers who are jointly responsible for planning, instructing, and evaluating a given group of pupils at any instructional level or in a selected subject-matter area or combination of subject-matter areas. A teaching team may or may not include assistants. (VI)

**TECHNICAL**—A term denoting a level of knowledge and skills possessed by an individual or required of an individual to perform an assignment. The level of skill is attained through education and training, usually including, at a minimum, an associate degree (or its equivalent) obtained through special study and/or experience. (IIR, IVR)

**TECHNICAL EDUCATION (subject matter)**—See appendix, p. 246.

**TECHNICAL HIGH SCHOOL**—See **VOCATIONAL AND/OR TECHNICAL HIGH SCHOOL**.

**TECHNICAL INSTITUTE**—An institution, or a division of an institution, offering instruction primarily in one or more of the technologies at the post-secondary instructional level. (IV, V-VI, VII, VR)

**TECHNICAL PERSONNEL**—Personnel working in one or more branches of technology at a level above the skilled trades and below professional status. (VII)

**TECHNICAL STAFF MEMBER**—A staff member who possesses the knowledge and skills of a technician (technical level competencies) and performs activities for the LEA which require this level of expertise for satisfactory completion. (IIR, IVR)

**TECHNICAL STAFF PER 1,000 STUDENTS IN AVERAGE DAILY ATTENDANCE**—The number representing the total full-time equivalency of technical staff assignments in a school system during a given period of time, multiplied by 1,000 and divided by the average daily attendance of students during this period. (VR)

**TECHNICAL STAFF PER 1,000 STUDENTS IN AVERAGE DAILY MEMBERSHIP**—The number representing the total full-time equivalency of technical staff assignments in a school system during a given period of time, multiplied by 1,000 and divided by the average daily membership of students during this period. (VR)

**TELECOURSE**—A full sequence of lessons offered over closed circuit or broadcast television for credit or for auditing purposes. Telecourse instruction may also include written work requirements, reading assignments, and examinations. (VI, VII)

**TEMPORARY SALARIES**—Full-time, part-time, and prorated portions of the gross salary costs for work by employees of the LEA who are hired on a temporary or substitute basis to perform work in positions of either temporary or permanent nature. (IIR, IVR)

**TENURE STATUS**—The employment status of the staff member whose employment is not subject to discontinuance by the governing authority except in

stipulated circumstances. (IV, VII) *See also* EMPLOYMENT STATUS.

**TERM**—A prescribed span of time when school is open and the pupils are under the guidance and direction of teachers. (IIR, IVR)

**TERM BONDS**—Bonds of the same issue, usually maturing all at one time and ordinarily to be retired from sinking funds. (II, IIR)

**TERMINAL CONTRACT**—A contract agreement setting beginning and ending dates of employment of the staff member with no legal obligation that the expiration of the contract is to be followed by another contract agreement. (IV) *See also* CONTINUING CONTRACT.

**TERMINAL LETTER**—A letter from the governing board of the school administrative unit appointing the individual to employment, setting forth beginning and ending dates of such appointment, and serving the staff and the board much the same as a terminal contract. (IV)

**TERMINAL PROGRAM**—A unified series of courses that is intended to be complete in itself. At the postsecondary instructional level, this refers to a program of instruction that is completed in less than 4 years and is designed to provide general education or occupational training for individuals who are not planning to enter a bachelor's degree program. Credits earned in such a program normally are creditable toward an associate degree. (V)

**TERMINATION (staff)**—*See* SEPARATION.

**TERMINATION BY ADMINISTRATIVE ACTION (staff)**—*See* INVOLUNTARY SEPARATION.

**TEST, ACHIEVEMENT**—*See* ACHIEVEMENT TEST.

**TEST, ADVANCED PLACEMENT**—*See* ADVANCED PLACEMENT TEST.

**TEST, ATTITUDINAL**—*See* ATTITUDINAL TEST.

**TEST, BASIC SKILLS**—*See* BASIC SKILLS TEST.

**TEST, DIAGNOSTIC READING**—*See* DIAGNOSTIC READING TEST.

**TEST, HEALTH**—*See* HEALTH TEST.

**TEST, MENTAL ABILITY (INTELLIGENCE)**—*See* MENTAL ABILITY (INTELLIGENCE) TEST.

**TEST, NORM-REFERENCED**—*See* NORM-REFERENCED TEST.

**TEST, PSYCHOMOTOR**—*See* PSYCHOMOTOR TEST.

**TEST, PURE TONE AUDIOMETRIC**—*See* PURE TONE AUDIOMETRIC TEST.

**TEST, READING READINESS**—*See* READING READINESS TEST.

**TEST, SCHOLASTIC APTITUDE**—*See* SCHOLASTIC APTITUDE TEST.

**TEST, STANDARD**—*See* STANDARD TEST.

**TEST OF HIGH SCHOOL EQUIVALENCY**—An approved examination (e.g., a test of general educational development) on the basis of which a State department of education or other authorized agency may certify that a person has met State requirements for high school equivalency. (VR) *See also* HIGH SCHOOL EQUIVALENCY EXAMINATION and TESTS OF GENERAL EDUCATIONAL DEVELOPMENT (GED).

**TESTING ASSIGNMENT**—An assignment to a staff member consisting principally of the activities of administering educational and psychological tests. (IV)

**TESTS OF GENERAL EDUCATIONAL DEVELOPMENT (GED)**—A battery of tests taken by adults who did not graduate from high school to measure the extent to which their past experiences (in-school and out-of-school) have contributed to their attaining the knowledge, skills, and understandings ordinarily acquired through a high school education. Certificates of high school equivalency are issued by most State departments of education for the successful completion of the Tests of General Educational Development. (VR) *See also* SCHOOL EQUIVALENCY EXAMINATION and CERTIFICATE OF HIGH SCHOOL EQUIVALENCY.

**TEXTBOOKS**—Books obtained primarily for use in certain classes, grades, or other particular student groups rather than for general school use. (II, III, VII, IIR, IVR)



**TEXTILE PRODUCTION AND FABRICATION** (subject matter)—See appendix, p. 265.

**THERAPIST ASSIGNMENT**—An assignment to perform activities involving occupational or physical methods of treatment and rehabilitation other than the use of drugs or surgery. (IIR, IVR)

**TOPIC OF INSTRUCTION**—An identifiable segment of a unit of instruction. (VI) See also **UNIT OF INSTRUCTION**.

**TOTAL CURRENT EXPENSE**—The total of all expenditures made during a period of time except for capital outlay and debt service. (II, IIR)

**TOWN**—In New England, a minor civil division corresponding in general to minor civil divisions in other States, but having some characteristics of a municipality. (Unpublished VIII)

**TOWNSHIP**—A minor civil division of the county, present in many but not all States. In New Jersey and Pennsylvania, special conditions apply. (Unpublished VIII)

**TOWNSHIP ROADS**—All roads legally classed as township property and maintained by the township or by some other political unit (usually a county) under contract with the township. Construction costs are financed by the township and with funds from the county and State under various funding and rebate programs. (Unpublished VIII)

**TRADE AND INDUSTRIAL OCCUPATIONS** (subject matter)—See appendix, p. 252.

**TRADE AREA**—The primary distributing area for the community's retail and wholesale functions. (Unpublished VIII)

**TRADE DISCOUNT**—An allowance usually varying in percentage with volume of transactions, made to those engaged in certain businesses and allowable irrespective of the time when the account is paid. The term should not be confused with "cash discount." (II, III, IIR)

**TRADE ORGANIZATION**—An interest group organized to further commercial interests. (Unpublished VIII)

**TRAINABLE MENTALLY RETARDED**—Mentally re-

tarded individuals who are capable of only very limited meaningful achievement in traditional basic academic skills; but who are capable of profiting from programs of training in self-care and simple job or vocational skills. (IV-VI-VR)

**TRAINING**—A planned and systematic sequence of instruction under competent supervision designed to impact predetermined skills, knowledge, or abilities with respect to designated occupational objectives, and, in addition to occupational training, may include, to the extent necessary, adult basic education, pre-vocational training, and refresher and reorientation training for professionals. (VI-VII)

**TRANSCRIPT**—An official record of student performance showing all schoolwork completed at a given school and the final mark or other evaluation received in each portion of the instruction. Transcripts often include an explanation of the marking scale used by the school. (V-VI-VR)

**TRANSFER (student)**—A student who leaves one class, grade, or school and moves to another class, grade, part-time program, or school. (V-VR)

**TRANSFER FROM OTHER FUNDS**—Money received unconditionally from another fund without expectation of repayment. Such monies are revenues of the receiving fund, but not of the LEA as a whole. Separate accounts may be maintained for specific funds. (IIR)

**TRANSFER PROGRAM**—A program of studies, at the postsecondary instructional level, designed primarily to yield credits which are chiefly creditable by four-year colleges and universities toward a bachelor's degree. (V-VI)

**TRANSFER PUPIL**—A pupil who severs his connection with a class, grade, or school in order to transfer to another class, grade, or school. This includes pupils who transfer or are promoted from an elementary school to a secondary school or from a junior high school to a senior high school. (V, IIR, IVR)

**TRANSFER VOUCHER**—A voucher authorizing posting adjustments and transfers of cash or other resources between funds or accounts. (II, IIR)

**TRANSFERRING**—Moving from one class, grade, or school to another class, grade, or school. (V)

**TRANSFERS BETWEEN FUNDS**—See **INTERFUND TRANSFERS**.

**TRANSFERS** (State department of education)—In the financial accounting sense, money which is taken from one fund under the control of the State department of education and added to another fund under the department's control. Such transfers are not receipts or expenditures of the department. (VII)

**TRANSPORTATION** (subject matter)—See appendix, p. 164.

**TRANSPORTATION FEES**—Money received for transportation of pupils. (IIR)

**TRANSPORTATION SERVICE VEHICLE**—A service truck, gasoline truck, car of supervisor, or other such vehicle not used for carrying pupils if at least half of its use is for the pupil transportation program. (I, II, III)

**TRANSPORTED STUDENT**—A pupil who is transported to and from school at public expense. (V, IIR)

**TRAVEL EXPENSES**—Costs for transportation, meals, hotel, and other expenses associated with traveling on business for the LEA. Payments for per diem in lieu of reimbursements for subsistence (room and board) also are charged here. (IIR-IVR)

**TREND ANALYSIS**—The result of repeated assessment of public opinion on certain basic issues over a period of time which makes possible comparisons between baseline data and subsequent changes. (Unpublished VIII)

**TRIAL BALANCE**—A list of the balances of the accounts in a ledger kept by double entry, with the debit and credit balances shown in separate columns. If the totals of the debit and credit columns are equal or their net balance agrees with a controlling account, the ledger from which the figures are taken is said to be "in balance." (II-IIB-IIR)

**TRIGONOMETRY** (subject matter)—See appendix, p. 221.

**TRUANCY**—The failure of a child to attend school regularly as required by law, without reasonable excuse for his absence. (V, VR)

**TRUST AND AGENCY FUNDS**—Used to account for

money and property held in trust by an LEA for individuals, government entities or nonpublic organizations. A Trust Fund is usually in existence over a longer period of time than an Agency Fund. Primarily, Agency Funds function as a clearing mechanism for cash resources collected by the LEA, held for a short period, and then disbursed to authorized recipients. (IIR)

**TUITION**—A payment or charge for instruction. (V-VI-VII, IIR, IVR-VR) See also **FEE**.

**TUITION EXPENDED**—Expenditures to reimburse other educational agencies for services rendered to students residing in the legal boundaries described for the paying LEA's, both within and outside the State of the paying LEA. (IIR)

**TUITION RECEIVED**—Money received from pupils, their parents, welfare agencies or other LEA's for education provided in the schools of the LEA. (IIR)

**TUITION STUDENT**—A student for whom tuition is paid. (V, VII, IIR, IVR, VR) See also **FULL-TUITION STUDENT** and **PARTIAL-TUITION STUDENT**.

**TWO-YEAR BRANCH COLLEGE**—A division of an institution of higher education, which offers the first 2 years of college instruction and which is located in a community different from that of its parent institution and beyond a reasonable commuting distance from the main campus of the parent institution. (VI, IIR, IVR)

**TWO-YEAR TECHNICAL INSTITUTE**—An institution offering instruction primarily in one or more of the technologies at the postsecondary instructional level. (VI, IIR, IVR)

**TYPE A LUNCH**—A lunch which meets the meal requirements prescribed by the Department of Agriculture under the National School Lunch Act of 1946, as amended. Such a lunch is designed to provide one-third of the recommended daily dietary allowance for a 10 to 12 year old child. (VR)

**TYPE OF EXCEPTIONALITY**—A general type of characteristic by which individuals are identified as being exceptional. (V, VI) See also **EXCEPTIONALITY**.

**TYPEWRITING** (subject matter)—See appendix, p. 162.

**TYPING AND RELATED OCCUPATIONS** (subject matter)—*See* appendix, p. 236.

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**UNAMORTIZED DISCOUNTS ON BONDS SOLD—**

That portion of the excess of the face value of bonds over the amount received from their sale which remains to be written off periodically over the life of the bonds. (IIR)

**UNAMORTIZED DISCOUNTS ON INVESTMENTS—**

The excess of the face value of securities over the amount paid for them which has not yet been written off. (IIR)

**UNAMORTIZED PREMIUMS ON BONDS SOLD—**

An account which represents that portion of the excess of bond proceeds over par value and which remains to be amortized over the remaining life of such bonds. (IIR)

**UNAMORTIZED PREMIUMS ON INVESTMENTS—**

The excess of the amount paid for securities over the face value which has not yet been amortized. Use of this account is normally restricted to long-term investments. (IIR)

**UNAPPROPRIATED SURPLUS—**That portion of the surplus of a given fund which is not segregated for specific purposes. (II-IIB-IIR)

**UNCLASSIFIED ELEMENTARY PUPIL—**An elementary school pupil who is not classified according to grade. (I-V) *See also* **UNGRADED CLASS**.

**UNCLASSIFIED SECONDARY PUPIL—**A secondary school pupil who is not classified according to grade. (I-V) *See also* **UNGRADED CLASS**.

**UNDER COMPULSORY AGE—**A term describing a child who has not yet reached the compulsory school attendance age. This information is maintained where required by law or regulation for school census or other purposes. (VR)

**UNDERACHIEVERS—**Students who score consistently and significantly below their expected performance levels on standardized achievement tests. Their expected performance levels are determined by using scores on standardized tests of ability to predict performance on standardized tests of achievement. (VR)

**UNDERAGE—***See* **UNDER COMPULSORY AGE**.

**UNDEREMPLOYED PERSON—**An individual whose skills/qualifications are greater than those required for the position he presently occupies. (Unpublished IX)

**UNDERGRADUATE STUDY—**College level courses of study which may lead to the customary bachelor of arts or bachelor of science degree. (IV)

**UNDEVELOPED AREA—**Land that has not been worked over and improved for specified purposes. (III) *See also* **IMPROVEMENTS TO SITE**.

**UNDIVIDED HIGH SCHOOL—***See* **FIVE- OR 6-YEAR HIGH SCHOOL**.

**UNENCUMBERED BALANCE OF APPROPRIATION OR ALLOTMENT—**That portion of an appropriation or allotment not yet expended or encumbered; the balance remaining after deducting from the appropriation or allotment the accumulated expenditures and outstanding encumbrances. (II-IIB-IIR)

**UNEXPENDED BALANCE OF APPROPRIATION OR ALLOTMENT—**That portion of an appropriation or allotment which has not been expended; the balance remaining after deducting from the appropriation or allotment the accumulated expenditures. (II-IIB-IIR)

**UNGRADED CLASS—**A class which is not organized on the basis of grade and has no standard grade designation. This includes regular classes which have no grade designations, special classes for exceptional students which have no grade designations, and many adult/continuing educational classes. Such a class is likely to contain students of different ages who, frequently, are identified according to level of performance in one or more areas of instruction rather than according to grade level or age level. Ungraded classes sometimes are referred to as "nongraded." (IV, V, VI-VII-VR) *See also* **REGULAR CLASS** and **GRADE**.

**UNGRADED ELEMENTARY CLASSES—**Elementary classes in which children are not grouped according to standard grade classification. (I)

**UNGRADED ELEMENTARY SCHOOL—**An elementary school which is not organized on a grade basis, but which offers work on the elementary instructional level. (IV, V, VI)

**UNGRADED HIGH SCHOOL**—A secondary school which is not organized on a grade basis, but which offers work on the secondary instructional level. (IV, V, VI)

**UNGRADED PRIMARY UNIT**—An organization, for all or a portion of the primary years of school, which has no grade designations or grade-level standards. (VI)  
*See also* **UNGRADED SCHOOL**.

**UNGRADED SCHOOL**—A school which has no grade designations or grade level standards. In such a school pupils are reclassified frequently according to individual progress. Aspects of subject matter taught are designed for the various abilities of individual pupils. Frequently, provision is made for independent study and research by pupils as well as for permissive self-selection of problems and materials. Achievement standards vary with the rate of learning for different pupils and pupil advancement can occur at any time. (VI, IVR)

**UNIT, ADMINISTRATIVE**—*See* **ADMINISTRATIVE UNIT**.

**UNIT, COST**—*See* **COST UNIT**.

**UNIT, HOUSING**—*See* **HOUSING UNIT**.

**UNIT, INTERMEDIATE ADMINISTRATIVE**—*See* **INTERMEDIATE ADMINISTRATIVE UNIT**.

**UNIT, LOCAL BASIC ADMINISTRATIVE**—*See* **LOCAL BASIC ADMINISTRATIVE UNIT**.

**UNIT, OPERATIONAL**—*See* **OPERATIONAL UNIT**.

**UNIT, ORGANIZATIONAL**—*See* **ORGANIZATIONAL UNIT**.

**UNIT, REPORTING**—*See* **REPORTING UNIT**.

**UNIT, RESOURCE**—*See* **RESOURCE UNIT**.

**UNIT, UNGRADED PRIMARY**—*See* **UNGRADED PRIMARY UNIT**.

**UNIT CONTROL**—A method of property control whereby a piece of equipment is accounted for as a single unit or entity in itself so that it retains its separate identity in the records, either on an individual record card or form, or as a line item in a ledger. (H)

**UNIT COST**—Expenditures for a function, activity, or service divided by the total number of units for which the function, activity, or service was provided. (II-III-IVR, IVR)

**UNIT OF INSTRUCTION**—A major subdivision of instruction within a course or within an aspect of subject-matter content provided for a self-contained class or for other pupils. Generally composed of several topics, a unit of instruction includes content and learning experiences developed around a central focus such as a limited scope of subject matter, a central problem, one or more related concepts, one or more related skills, or a combination of these. (VI, IVR)

**UNIT OF MEASURE**—A combination of statistical elements in education usually expressed in ratios, such as pupils per teacher, square feet per pupil, cost per pupil, cost effectiveness ratio. (IIR, IVR)

**UNIT OF WORK**—The number or amount of objects serviced or recipients served by a staff member's efforts. (IVR)

**UNIVERSAL BIRTH NUMBER**—An identification number assigned to an individual by the Bureau of Vital Statistics of a state, using a combination of digits representing area code, birth registration number, and year of birth. (VR)

**UNIVERSITY**—A postsecondary institution which typically comprises one or more colleges and one or more graduate professional schools. (VII) *See also* **COLLEGE**.

**UNLIQUIDATED ENCUMBRANCES**—Encumbrances outstanding. (II, IIB, IIR) *See also* **ENCUMBRANCES**.

**UNRESTRICTED GRANTS-IN-AID**—Revenues received as grants by the LEA which can be used for any legal purpose desired, by the LEA without restriction. (IIR)

**UPGRADING IN CURRENT OCCUPATION PROGRAMS**—Learning experiences concerned with skills and knowledge designed primarily to extend or update workers' competencies for occupations in which they are already employed. (IIR, IVR)

**UPHOLSTERING (subject matter)**—*See* appendix, p. 265.

**UPKEEP OF GROUNDS RESPONSIBILITY**—The area of responsibility for maintaining the grounds and the equipment on the grounds (other than buildings) owned or used by the school system in a state of good condition and repair. It consists of such activities as regrading grounds, reseeding grounds, replacing shrubs, and repairing and replacing walks, fences, playground surfaces, lawn sprinkling systems, flagpoles, and sewers. (IIR, IVR)

**UPPER ELEMENTARY GRADES**—The elementary grades following the intermediate elementary grades, usually grades 7 and 8 in an 8-4 organizational pattern. (IV, V, VI, VII)

**URBAN BLIGHT**—Usually defined as an economic dislocation, but commonly used to imply deterioration or the existence of deficiencies in the quality of structures and their immediate environment. (Unpublished VIII)

**URBAN FRINGE**—(1) the area beyond the established suburbs of a city where urban and rural characteristics converge. It is an area of mixed land use and is less politically organized than the suburbs. Because of an absence of zoning regulations and the relatively lower land cost, types of land use that are considered undesirable (such as automobile junk yards) are often found in fringe areas. This area is also referred to as the rural-urban fringe. (2) As defined by the U.S. Census, the built-up area surrounding a large city, which is continuous with the city and has an average density of 2,000 persons per square mile. In this sense the urban fringe includes the suburbs and the fringe as defined above. (Unpublished VIII)

**URBAN PLACE**—Any incorporated or unincorporated place of 2,500 inhabitants or more, or one of the towns, townships or counties classified as urban. (Unpublished VIII)

**URBAN POPULATION**—All persons living in (a) places of 2,500 inhabitants or more incorporated as cities, boroughs, villages, and towns (except towns in New England, New York, and Wisconsin); (b) the densely settled urban fringe, whether incorporated or unincorporated, of urbanized areas; (c) towns in New England and the townships in New Jersey and Pennsylvania which contain no incorporated municipalities as subdivisions and have either 25,000 inhabitants or more or a population of 2,500 to 25,000 and a density of 1,500 persons or more per square mile; (d) counties in States

other than the New England States, New Jersey, and Pennsylvania that have no incorporated municipalities within their boundaries and have a density of 1,500 persons or more per square mile; and (e) unincorporated places of 2,500 inhabitants or more; (Unpublished VIII)

**URBAN RENEWAL**—A form of recuperative change in the physical city by which dysfunctional or-outmoded structures and facilities are replaced in response to pressures of economic and social change. (Unpublished VIII)

**URBANIZED AREA**—An area encompassing a central city or twin cities of 50,000 or more population plus the surrounding closely-settled incorporated places and unincorporated areas that meet certain criteria with respect to intensity of use. (Unpublished VIII)

—V—

**VALIDITY**—The extent to which a device measures what it purports to measure. (Unpublished IX)

**VALUE**—A term designating (1) the act of describing anything in terms of money; or (2) the measure of a thing in terms of money. (III) *See also* APPRAISAL; APPRAISED VALUE; BOOK VALUE; INSURABLE VALUE; PRESENT WORTH; REPLACEMENT COST; and SALVAGE VALUE.

**VEHICLE**—A conveyance used to transport persons or objects. (III, VI-IIR, IVR)

**VEHICLE OPERATING ASSIGNMENT**—An assignment consisting primarily of driving a vehicle such as a bus, truck, or automobile used in the service of the LEA. (IV-IIR, IVR)

**VEHICLE SERVICING AND MAINTENANCE SERVICES (pupil transportation)**—Activities concerned with maintaining pupil transportation vehicles in good condition; including repairing vehicles; replacing vehicles parts; and cleaning, painting, greasing, fueling, and inspecting vehicles for safety. (IIR, IVR)

**VEHICLE SERVICING AND MAINTENANCE SERVICES (for other than buses)**—Activities concerned with maintaining general purpose vehicles such as trucks, tractors, graders, and staff vehicles in good condition. This data element includes such activities as repairing

vehicles, replacing vehicle parts, cleaning, painting, greasing, fueling, and inspecting vehicles for safety, i.e., preventive maintenance. (IIR, IVR)

**VETERAN**—A person who served on active duty as a member of the active Armed Force of the United States and was discharged or released therefrom under conditions other than dishonorable. (National Guard personnel and reservists called to active duty for civil disturbances, disasters, or training for a limited period are not considered veterans under this definition.) (VR)

**VETERANS' DEPENDENTS' EDUCATIONAL ASSISTANCE PROGRAM**—Provisions (in chapter 35, title 38, U.S. Code) for education and other benefits for spouses, widows, widowers, and children of veterans who died or are totally disabled because of service-connected disabilities, or are prisoners of war or missing in action for more than 90 days. (VR) *See also* VETERAN.

**VETERANS' EDUCATIONAL ASSISTANCE PROGRAM**—Provisions (in chapter 34, title 38, U.S. Code) for education and other benefits at approved educational and training institutions for veterans who served in the U.S. Armed Forces for more than 180 days after January 31, 1955 and who were discharged under conditions other than dishonorable. Entitlement terminates 8 years after separation or after May 31, 1966, whichever occurs later. (VR) *See also* VETERAN.

**VETERANS' VOCATIONAL REHABILITATION PROGRAM**—Provisions (in chapter 31, title 38, U.S. Code) for vocational rehabilitation for service-disabled veterans who served in the U.S. Armed Forces, were discharged under conditions other than dishonorable, and are in need of such rehabilitation because of the handicap of their service-connected disabilities. (VR) *See also* VETERAN.

**VISITING TEACHER (home-school counselor)**—A person who visits pupils and parents in the home, assisting the school and the home in solving the personal adjustment problems of pupils. (I, II-IV, IIR, IVR) *See also* SOCIAL WORK.

**VISUAL HANDICAP**—An impairment in vision that is sufficiently severe to adversely affect an individual's performance. A person identified as having a visual handicap may be referred to as partially seeing or blind, according to the nature and severity of his handicap. (V, VI-VR)

**VISUALLY HANDICAPPED**—Individuals having a visual impairment sufficiently severe to adversely affect normal progress in the usual school program. Such a person may be further identified as partially seeing or blind, according to the nature and severity of the handicap. (VR) *See also* PARTIALLY SEEING and BLIND.

**VOCAL MUSIC (subject matter)**—*See* appendix, p. 223.

**VOCATIONAL AND AVOCATIONAL SKILLS DEVELOPMENT (subject matter)**—*See* appendix, p. 271.

**VOCATIONAL AND INDUSTRIAL ARTS SHOP ROOM**—*See* SHOP ROOM.

**VOCATIONAL AND/OR TECHNICAL SCHOOL**—A school which is separately organized under the direction and management of an administrator (such as a principal) for the primary purpose of offering education and training in one or more semiskilled, skilled, or technical occupations. (VI-IIR, IVR)

**VOCATIONAL CLUSTERS**—(1) A group or family of jobs or occupations with rather closely related requirements for employment, (2) the organization of vocational education courses so that the students in the program can be made employable in a number of related jobs and industries. (Unpublished IX)

**VOCATIONAL COURSE**—A course approved under State plan requirements for vocational and technical education. (VI)

**VOCATIONAL OR TRADE HIGH SCHOOL**—A secondary school which is separately organized under a principal for the purpose of offering training in one or more skilled or semiskilled trades or occupations. It includes such schools whether federally aided or not. Departments of other types of high schools which offer commercial, agricultural, home economics, industrial arts, and other applied art courses would not be considered as separately organized under the direction and management of an administrator (such as a principal). (VII)

**VOCATIONAL REHABILITATION**—The service of preparing disabled persons for remunerative employment through diagnosis, guidance, physical restoration, training, and placement. (VR)

**VOCATIONAL-TECHNICAL EDUCATION**—Educa-

tion in one or more semiskilled, skilled or technical occupations, provided by a school which is separately organized under the direction and management of an administrator (such as a principal). (VII)

**VOICE IMPAIRMENT**—Abnormal voice quality caused by pathology or misuse of the larynx. (VR)

**VOLUNTARY TERMINATION**—The situation existing when a staff member, acting on his own initiative, elects to separate from employment with the school system. (IV)

**VOLUNTEERED SERVICES**—Services provided an LEA without compensation to the provider. (IVR)

**VOUCHER**—A document which authorizes the payment of money and usually indicates the accounts to be charged. (II, IIR, IVR)

**VOUCHER SYSTEM**—A system which calls for the preparation of vouchers for transactions involving payments and for the recording of such vouchers in a special book of original entry known as a voucher register in the order in which payment is approved. (II, IIR, IVR)

**VOUCHERS PAYABLE**—Liabilities for goods and services received as evidenced by vouchers which have been pre-audited and approved for payment but which have not been paid. (IIR)

—W—

**WAREHOUSE**—A building used primarily to store supplies and equipment for the school district as a whole. (III)

**WAREHOUSE INVENTORY ADJUSTMENT**—Amounts reflected as a deficit as a result of an audit or count of items held in a stores or warehouse inventory. (IIR)

**WAREHOUSING AND DISTRIBUTING SERVICES**—Operation of the systemwide activities of receiving, storing, and distributing supplies, furniture, equipment, materials, and mail. This data element includes the pickup and transportation of cash from school facilities to the central administrative office or bank, for control and/or deposit. (IIR, IVR)

**WARRANT**—An order drawn by the school board to the LEA treasurer ordering him to pay a specified amount to a payee named on the warrant. Once signed by the treasurer the warrant becomes a check payable by a bank named on the warrant by the treasurer. (II-IIB-IIR)

**WARRANT INTEREST**—Interest paid on registered warrants. (II, IIR) *See also* REGISTERED WARRANT.

**WARRANTS PAYABLE**—Warrants issued by the school board but not yet signed by the treasurer. (IIB, IIR)

**WELFARE**—The system for providing goods and/or services to financially indigent or physically incapacitated persons or their families for the purpose of sustaining a minimal life style for an indeterminate period. Eligibility requirements are established by law or ordinance at the funding source which may be either local, State, or Federal. (VR)

**WELFARE ACTIVITIES**—Providing for personal needs of indigent persons, when such aid is restricted to indigent persons, and for providing services in connection with disaster relief. (IIR, IVR)

**WELFARE AGENCIES**—Governmental or private organizations having the purpose of aiding poor and disadvantaged individuals. (Unpublished VIII)

**WITHDRAWAL**—An individual who has withdrawn from membership in a class, grade or school by transferring, by completing school work, by dropping out, or because of death. (I-V)

**WITHDRAWING**—Leaving a class, grade, or school by transferring, by completing school work, by dropping out, or because of death. The date of withdrawal from membership is the first day after the date of the last day of membership, if known; otherwise, the date of withdrawal is considered to be the date on which it becomes known officially that the pupil has left. (V)

**WITHHOLDING**—The process of deducting from a salary or wage payment an amount, specified by law or regulation, representing the estimated Federal or State income tax of the individual that the employer must pay to the taxing authority. (IIR, IVR)

**WITHHOLDING TAXES**—*See* WITHHOLDING.

**WOODS** (subject matter)—See appendix, p. 205.

**WORK IN PROGRESS**—A term limited to a building under contract for construction but which has not been finally accepted by the school district. A building under construction by school district employees but which has not been completed is also classified as work in progress. (III)

**WORK ORDER**—A written order authorizing and directing the performance of a certain task, issued to the person who is to direct the work. Among the information shown on the order are the nature and location of the job, specifications of the work to be performed, and a job number which is referred to in reporting the amount of labor, materials, and equipment used. (II, IIR, IVR)

**WORKLOAD**—A measure denoting the work performed by school employees during the regular school hours. (I-IVR)

**WORK-STUDY PROGRAM**—A school program designed to provide employment for students who could not continue in school without the financial support provided through a job. The unemployment may or may not be curriculum related. (Cooperative Programs

provide work experiences specifically related to the student's instructional program. The student's on-the-job training is an integral part of his total school curriculum.) (VII, IVR)

—Y—

**YOUTH AGENCIES**—Governmental or private organizations whose purpose is to deal with problems of adolescents and young adults. (Unpublished VIII)

**YOUTH ORGANIZATIONS**—Groups of adolescents or young adults organized for various purposes such as recreation, education, or service. (Unpublished VIII)

—Z—

**ZONING**—The public regulation of land and building use in order to control the character of the community. Ideally, areas of the city or town are restricted to specialized usage for the benefit of the public welfare, for example, so that residential areas will not become interspersed with industry. (Unpublished VIII)



## A P P E N D I X

The appendix reproduces chapter 6, in its entirety, of Handbook VI, *Standard Terminology for Curriculum and Instruction in Local and State School Systems*, State Educational Records and Reports Series. Chapter 6 contains the definitions of all terms classified in chapter 5 of Handbook VI. The coding of terms is identical in both chapters.

It should be noted that chapters 5 and 6 of Handbook VI are now a Department of Health, Education, and Welfare Agency Data Standard. It is Standard Number 1 in the DHEW Information Processing Standards Register, titled *Codes for Curriculum Subject Matter in Local and State School Systems*.

If the user of the Glossary is interested in additional content of Handbook VI, it may be purchased from:

Superintendent of Documents  
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## Appendix

### DEFINITIONS OF ITEMS OF INFORMATION ABOUT SUBJECT-MATTER AREAS AND COCURRICULAR ACTIVITIES

The items of information in each of the 20 subject-matter areas represent (1) selected aspects of subject matter as appropriate for elementary, secondary, junior college, and adult education, and (2) a selection of items of information which will serve to describe the subject matter in a majority of the instructional programs across the Nation. Of the 20 subject-matter areas seven are identified with vocational education. These are Agriculture, Distributive Education, Health Occupations Education, Home Economics, Office Occupations, Technical Education, and Trade and Industrial Occupations. Of the 22 areas one is devoted to General Elementary Education and General Secondary Education and one to Cocurricular Activities.

The items of information about subject matter in this appendix are only briefly described, however, there are many items of information concerned with the *organization* and *administration* of curriculum and instruction which can be related to these items to provide additional description of subject matter. These items are classified and described in this handbook in chapters 3 and 4, respectively.

#### AGRICULTURE 01.00 00 00 00

Agriculture is comprised of the group of related courses or units of subject matter which are organized for carrying on learning experiences concerned with preparation for or upgrading in occupations requiring knowledge and skills in agricultural subjects. The functions of agricultural production, agricultural supplies, agricultural mechanization, agricultural products (processing), ornamental horticulture, forestry, agricultural resources, and the services related thereto, are emphasized in the instruction designed to provide opportunities for pupils to prepare for or improve their

competencies in agricultural occupations. An agricultural occupation may include one or any combination of these functions.

The Ad Hoc Committee for Agriculture applied the following rationale to the selection of the items for placement in the Agriculture area: (1) the items were determined by consensus of the committee to be appropriate to agriculture, (2) the items could be defined in brief form using only salient descriptive elements, and (3) the various items classified under Agriculture were identifiable by titles which the *ad hoc* committee considered to be most commonly used in agriculture.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items included in the X 07 00. Series.—Evaluation and Curriculum Improvement on pages 71-78 and the items included in the X 32 00. Series. Services Supporting Instruction on pages 90-96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13. (This paragraph refers to chapters 3 and 4 in Handbook VI. A similar paragraph appears in other classifications which follow.)

Future Farmers of America (FFA) chapters and related leadership training and supervised occupational experience programs are significant integral activities which aid agricultural education in making contributions to the guidance and total general educational development of pupils. The Future Farmers of America and related leadership training permeate every aspect of the instructional program in agriculture. The foundation upon which the FFA is built includes leadership and character development, sportsmanship, cooperation, service, thrift, scholarship, improved agriculture, organized recreation, citizenship, and patriotism. (For a more detailed treatment of the aims and purposes of FFA see *Official Manual of Future*

## 01 AGRICULTURE--(Continued)

*Farmers of America.*<sup>1</sup> (See also Item 20.01 11 00 00 *Future Farmers of America*, page 243 of this handbook.)

Included in this subject-matter area are the items of information which identify various aspects of agriculture.

### 01.01 00 00 00 AGRICULTURAL PRODUCTION

Subject matter and learning activities which are concerned with the principles and processes involved in the planning related to and the economic use of facilities, land, water, machinery, chemicals, finance, and labor in the production of plant and animal products. In practice, activities include classroom instruction and laboratory experiences, in and out of school, including farms, ranches, and other agriculturally related establishments. Aspects of agricultural production are organized under a variety of descriptive titles, such as Animal Science, Plant Science, Farm Mechanics, Farm Business Management, and Other Agricultural Production.

#### 01.01 01 00 00 Animal Science

Planned learning experiences which are concerned with the study and the operations dealing with theories, principles, and practices involved in producing animals and animal products for economic and other uses. (Included as 16.02 01 00 00 *Animal Science* under TECHNICAL EDUCATION and as part of 16.02 02 00 00 *Dairy Technology* under TECHNICAL EDUCATION)

#### 01.01 01 01 00 Livestock and Poultry

Organized subject matter and experiences designed for the study of an application to various major livestock enterprises. Among the considerations emphasized in instruction are selection and breeding, nutrition, animal health, housing and feeding practices, and management and marketing. The following are frequently studied, but are not defined here because of their commonly understood descriptions.

#### 01.01 01 01 01 Dairy Cattle

#### 01.01 01 01 02 Beef Cattle

#### 01.01 01 01 03 Horses

<sup>1</sup>Official Manual of Future Farmers of America, a bulletin prepared by the Future Farmers Supply Service, (Alexandria, Va.: 1968), p. 11.

#### 01.01 01 01 04 Swine

#### 01.01 01 01 05 Sheep

#### 01.01 01 01 06 Poultry

#### 01.01 01 01 99 Other Livestock and Poultry

Include here other livestock and poultry emphasized in instruction which are not listed above, e.g., goats, buffalo, and laboratory animals. (Specify)

#### 01.01 01 02 00 Nutrition

The study of the relationship of proteins, fats, carbohydrates, water, minerals, and vitamins in the production of meat, milk, eggs, and wool. (see also Major Aspects of the Biological Sciences, 13.02 00 17 00 *Nutrition*, under NATURAL SCIENCES.)

#### 01.01 01 03 00 Genetics

The study of the principles of inheritance, and their applications for the improvement of animals through breeding and selection. (See also Major Aspects of the Biological sciences, 13.02 00 14 00 *Genetics*, under NATURAL SCIENCES.)

#### 01.01 01 04 00 Physiology

A study of the body processes and functions related to animal production such as lactation, reproduction (including artificial insemination and heat detection), egg production, digestion, growth, wool production, and other body processes and functions. (See also Major Aspects of the Biological Sciences, 13.02 00 20 00 *Physiology*, under NATURAL SCIENCES.)

#### 01.01 01 05 00 Animal Health

The study of environment, drugs, antibiotics, vaccinations, blood tests, and other management factors in the prevention and control of diseases.

#### 01.01 01 06 00 Production Management

A combination of subject matter and experience concerned with operating and managing a commercial unit involving a specific class of animals.

#### 01.01 01 06 01 Feeding Practices

A study of the "least-cost" combinations of feed ingredients for achieving maximum performance.

#### 01.01 01 06 02 Housing Practices

A study of the housing and other environmental needs of a specific kind of animal.

01.01 01 06 99 *Other Production Management*

Include here other subject matter and experiences emphasized in production management which are not listed above. (Specify.)

01.01 01 99 00 *Other Animal Science*

Include here other organized subject matter and experiences emphasized in animal science which are not classifiable or listed above. (Specify.)

01.01 02 00 00 *Plant Science*

Planned learning experiences which are concerned with the study and operations dealing with principles and practices involved in the culture and production of agricultural plants, (Included as 16.02 04 00 00 *Plant Science* under TECHNICAL EDUCATION)

01.01 02 01 00 *Crops*

Organized subject matter and experiences designed for the study of an application to various major crop enterprises. Among the considerations emphasized in instruction are genetics, nutrition, soils, plant pathology, entomology, and disease and pest control. The following crops are frequently studied.

01.01 02 01 01 *Cereal Grain Crops*

The study of principles and practices involved in the production of cereal grains (members of the grass family such as corn, wheat, rice, and oats).

01.01 02 01 02 *Fiber Crops*

The study of principles and practices involved in the production of fiber-producing plants such as cotton and flax.

01.01 02 01 03 *Forage Crops*

The study of the principles and practices involved in the production of forage for livestock, e.g., grasses and legumes.

01.01 02 01 04 *Oil Crops*

The study of principles and practices involved in the production of oilseed crops such as soybeans, peanuts, and sunflowers.

01.01 02 01 05 *Tree Fruit and Nut Crops*

The study of principles and practices involved in the production of citrus fruits, apples,

peaches, pecans, walnuts, and other tree fruit and nut crops.

01.01 02 01 06 *Small Fruit Crops*

The study of principles and practices involved in the production of strawberries, raspberries, blueberries, grapes, and other small fruit crops.

01.01 02 01 07 *Vegetable Crops*

The study of principles and practices involved in the production of potatoes, tomatoes, beans, sweet corn, peas, and other vegetable crops.

01.01 02 01 08 *Ornamental Crops*

The study of the principles and practices involved in the production of shrubs, trees, flowers, turf, and other plants used for ornamental and esthetic purposes. (See also 01.05 00 00 00 *Ornamental Horticulture (Production, Processing, Marketing, and Services)*.)

01.01 02 01 09 *Farm Forestry*

(For definition see 01.07 00 00 00 *Forestry (Production, Processing, Management, Marketing and Services)*.)

01.01 02 01 99 *Other Crops*

Include here other crops emphasized in instruction which are not listed above. (Specify.)

01.01 02 02 00 *Soils*

The study of the physical, chemical, biological, and fertility properties of soils in relation to their management for crop production and other agricultural operations.

01.01 02 03 00 *Nutrition*

The study of the nutrient and soil fertility requirements of various agricultural plants. (See also Major Aspects of the Biological Sciences, 13.02 00 17 00 *Nutrition*, under NATURAL SCIENCES.)

01.01 02 04 00 *Genetics*

The study of the principles of inheritance and their applications for the improvement of plants through breeding and selection. (See also Major Aspects of the Biological Sciences, 13.02 00 14 00 *Genetics*, under NATURAL SCIENCES.)

01.01 02 05 00 *Physiology*

The study of life processes in plants and

## 01 AGRICULTURE--(Continued)

their implications in production principles and practices. (See also Major Aspects of the Biological Sciences, 13.02 00 20 00 *Physiology*, under NATURAL SCIENCES.)

### 01.01 02 06 00 Plant Pathology

The study of the symptoms, causes, and control (chemical and nonchemical) of plant diseases.

### 01.01 02 07 00 Entomology

The study of beneficial and harmful insects and their near relatives such as ticks, snails, slugs, spiders, and mites and their impact on agricultural production and methods of control. (See also Major Aspects of the Biological Sciences, 13.02 00 12 00 *Entomology*, under NATURAL SCIENCES.)

### 01.01 02 08 00 Plant Disease and Pest Control

The study of symptoms, causes, and control of plant injuries and diseases caused by pests such as insects, diseases, nematodes, snails, mites, and injurious birds, and the chemical, physical, biological, cultural, and genetic methods of control of the undesirable forms of plant and animal life.

### 01.01 02 08 01 Insecticides

The study of substances or mixtures of substances that may be used to destroy or otherwise control insects and their near relatives, such as ticks, snails, slugs, mites, and spiders.

### 01.01 02 08 02 Fungicides, Bactericides, Viricides, and Nematocides

The study of substances used to destroy or inhibit pathogens, particularly those causing plant diseases. Included for study are fungicides and nematocides which also act as bactericides and insecticides.

### 01.01 02 08 03 Herbicides

The study of compounds used to destroy or inhibit the growth of selected plants.

### 01.01 02 08 04 Rodenticides

The study of compounds used to destroy rodents—especially rats and mice—and similar small animals.

### 01.01 02 08 05 Nonchemical Controls

The study of other pest control (management of populations) such as biological, mechanical, and cultural methods.

### 01.01 02 08 06 Plant Genetic Resistance

The study and application of genetics and breeding of plants having characteristic resistance to attack, infection, or loss from disease and insect pests. (See also 01.01 02 04 00 *Genetics*, above.)

### 01.01 02 08 99 Other Plant Disease and Pest Control

Include here other subject matter and experiences emphasized in plant disease and pest control. (Specify.)

### 01.01 02 09 00 Environmental Biology

The study of the interaction of plant life processes with factors of the environment, and their characteristics and implications for managing plant production.

### 01.01 02 99 00 Other Plant Science

Include here organized subject matter and experiences emphasized in plant science which are not classifiable or listed above. (Specify.)

### 01.01 03 00 00 Farm Mechanics

(See the category 01.03 00 00 00 *Agricultural Mechanics*.)

### 01.01 04 00 00 Farm Business Management

Planned learning activities concerned with farm resource analysis, accounting, production, financing, resource acquisition, purchasing, farm inputs, performance records, contracts, marketing, and maintenance. The results of these learning activities are applied to formulating decisions involved in managing a farm or ranch operation.

### 01.01 04 01 00 Farm Accounts

Subject matter and experiences concerned with accounting as applied to the various enterprises in agricultural production. (See also the categories 03.01 00 00 00 *Accounting*, and 03.03 00 00 00 *Bookkeeping*, under BUSINESS.)

### 01.01 04 02 00 Performance Records

Planned study and experiences concerned with the use of records in determining the efficiency of a production operation, e.g., yields per acre, pounds of milk per cow, and labor efficiency.

### 01.01 04 03 00 Budgeting and Analysis

Subject matter and learning experiences involving the use of quantitative input-output relationships, costs, and price expectations to secure optimum

economic returns to the enterprises of the commercial agricultural unit or the farm as a whole.

**01.01 04.04 00 Manpower Utilization**

The study of factors that contribute to efficient and economic use of labor resources, and the implications of these factors for labor management decisions of the farm manager. Emphasis in instruction is on such considerations as the development of knowledge about and ability to work with agricultural manpower; employee selection; employer-employee relations; wages and working conditions; legal requirements; and conditions affecting the employee, e.g., education, health, and language barriers.

**01.01 04 05 00 Purchasing and Marketing**

The study of (1) acquiring (purchasing) input units such as livestock, feed, seed, fertilizer, machinery, and equipment, and (2) marketing as applied to animal and plant products.

**01.01 04 06 00 Financial and Legal Management**

The study of factors involved in the control and application of the financial and legal aspects of managing a commercial agricultural production business.

**01.01 04 07 00 Farm Organizations**

Subject matter concerned with a comprehensive study of current programs of the several national, regional, and local farmers' organizations—including their development and purposes.

**01.01 04 08 00 Government Programs**

The study of current government policies, regulations, and programs available to and having influence upon agricultural production and management, farm prices, and income of rural people.

**01.01 04 99 00 Other Farm Business Management**

Include here other organized subject matter and experiences emphasized in farm business management which are not listed above.

**01.01 99 00 00 Other Agricultural Production**

Include here other organized subject matter and experiences emphasized in agricultural production which are not listed above. (Specify.)

**01.02 00 00 00 AGRICULTURAL SUPPLIES/  
SERVICES**

Subject matter and learning experiences concerned with preparing pupils for occupations involved in

providing consumable supplies used in the production phase of agriculture—including processing, marketing, consulting, and other services. Various aspects of agricultural supplies are organized under descriptive titles such as those which follow.

**01.02 01 00 00 Agricultural Chemicals**

The study of a variety of chemicals, drugs, and related products which are associated with the production of animal and plant products. Usually included for study are various types of chemicals used to prevent, control, or cure animal and plant diseases and control pests.

**01.02 02 00 00 Feeds**

The study of the business of processing and distributing feeds and feedstuffs.

**01.02 03 00 00 Seeds**

The study of the business of producing, processing, and distributing seeds.

**01.02 04 00 00 Fertilizers (Plant Food)**

The study of the principles concerned with the analysis, sale, and application of chemical elements known to be necessary for plant growth. These elements are classified as follows: primary—N,P,K; secondary—Ca, Mg, S; and micronutrients—B, Cu, Fe, Mn, Mo, Zn, Ce.

**01.02 99 00 00 Other Agricultural Supplies/Services**

Include here other organized subject matter and experiences emphasized in agricultural supplies which are not listed above. (Specify.)

**01.03 00 00 00 AGRICULTURAL MECHANICS**

A combination of subject matter and activities designed to develop abilities necessary for assisting with and/or performing the common and important operations or processes involved in the selection, operation, maintenance, and use of agricultural power, agricultural machinery and equipment, structures and utilities, soil and water management, and agricultural mechanics shop, including kindred sales and services.

**01.03 01 00 00 Agricultural Power and Machinery**

A combination of subject matter and experiences designed to develop in pupils the abilities to (1) recognize and identify the fundamental principles of selection, operation, service, maintenance, repair, and safety in agricultural power—engines, electricity, and hydraulics, and (2) plan, install, service, assemble,

## 01 AGRICULTURE—(Continued)

adjust, operate, and repair farm machinery. (See also 16.02 02 02 00 *Agricultural Machinery and Equipment* under TECHNICAL EDUCATION.)

### 01.03 02 00 00 Agricultural Structures and Conveniences

Learning activities designed to assist pupils in developing the ability to plan, select materials for, and construct and maintain agricultural structures and conveniences. (See also 16.01 02 03 00 *Agricultural Structures and Conveniences* under TECHNICAL EDUCATION.)

### 01.03 03 00 00 Soil Management

A combination of subject matter and practical experiences designed to develop knowledge and skills concerned with surveying and classifying soils; determining cropping systems and fertilizer; and conditioning, and cultural practices that will result in efficient agricultural production.

### 01.03 04 00 00 Water Management

A combination of subject matter and practical experiences designed to develop knowledge and skills concerned with surveying, planning, laying out; constructing, using, and maintaining irrigation, drainage, water conservation, runoff, and erosion control systems, and with maintaining proper soil-water-plant relationships.

### 01.03 05 00 00 Agricultural Mechanics Skills

Planned learning experiences designed to develop skills, abilities, and judgments necessary to select, use, and maintain hand and power tools, arc and acetylene welders, and to plan and establish home farm shops.

### 01.03 06 00 00 Agricultural Construction and Maintenance

A combination of subject matter and experiences designed to develop skills and abilities necessary in the planning, layout, fabrication, and maintenance of farm and other agricultural equipment, especially small custom-built devices.

### 01.03 07 00 00 Agricultural Electrification

A combination of subject matter and experiences designed to provide opportunities for pupils to gain knowledge and understanding concerning making effective use of electricity and electrical equipment on

farms, ranches, and other agricultural establishments. Included for study are the principles of electricity, maintenance and operation of equipment, and safety factors related thereto. (See also 16.01 02 01 00 *Agricultural Electrification Technology* under TECHNICAL EDUCATION.)

### 01.03 99 00 00 Other Agricultural Mechanics

Include here other organized subject matter and experiences emphasized in agricultural mechanics which are not listed above. (Specify.)

## 01.04 00 00 00 AGRICULTURAL PRODUCTS

A combination of subject matter and learning experiences designed to teach basic principles and management decisions involved in the science and technology of farm products, including marketing, inspection, and processing. The groups of products include meat, fish, poultry, and eggs; dairy products; fruits and vegetables; cereal grains; oilseeds; cotton, tobacco, and wool; and others.

### 01.04 01 00 00 Food Products

A combination of subject matter and learning experiences concerned with the scientific principles and operations involved in the preparation of agricultural products for sale and consumption, including home and institutional preparation of food and its nutritive value. (Included as 16.02 03 00 00 *Food Processing Technology* under TECHNICAL EDUCATION.)

### 01.04 01 01 00 Meat, Fish, Poultry, Eggs

A combination of subject matter and practical experiences concerned with the information, processes, science, and decisions associated with meats and meat products, fish, poultry, and eggs.

### 01.04 01 02 00 Dairy Products

A combination of subject matter and practical experiences concerned with the information, processes, science, and decisions associated with milk and products derived from milk, e.g., cream, ice cream, butter, and cheese. (Included as 16.02 02 00 00 *Dairy Technology* under TECHNICAL EDUCATION.)

### 01.04 01 03 00 Fruits and Vegetables

A combination of subject matter and practical experiences concerned with the information, processes, science, and decisions associated with fruit and vegetable products.

01.04 01 04 00 Cereal Grains

A combination of subject matter and practical experiences which are concerned with the information, processes, science, and decisions associated with cereal grains and grain products, e.g., wheat and flour.

01.04 01 05 00 Oilseeds

A combination of subject matter and practical experiences concerned with the information, processes, science and decisions associated with oilseeds and oilseed products, e.g., soybeans, cottonseed, sunflower, and the oils derived from these seeds and any other edible oilseeds.

01.04 01 99 00 Other Food Products

Include here other subject matter and practical experiences emphasized in food products which are not listed above, e.g., mushrooms, nut products, beverages, sugar, honey, maple products, condiments, and derivatives from nonfood crops, e.g., cottonseed oil. (Specify.)

01.04 02 00 00 Nonfood Products

A combination of subject matter and experiences concerned with the information, scientific principles, processes, and management decisions related to processing and marketing functions associated with nonfood products such as cotton, tobacco, and wool, as well as the industrial nonfood uses of grains and oilseeds.

01.04 02 01 00 Cotton

Subject matter and learning activities concerned with assembling, ginning, baling, processing, and marketing the fibers and byproducts of cotton.

01.04 02 02 00 Tobacco

Subject matter and learning experiences concerned with grading, storing, processing, and marketing tobacco.

01.04 02 03 00 Wool

Subject matter and learning experiences concerned with assembling, sorting, grading, processing, and marketing wool.

01.04 02 99 00 Other Nonfood Products

Include here other subject matter and practical experiences emphasized in nonfood products which are not listed above, e.g., furs, hemp, and gum. (Specify.)

01.04 99 00 00 Other Agricultural Products

Include here other organized subject matter and practical experiences emphasized in agricultural products which are not classifiable or listed above. (Specify.)

01.05 00 00 00 ORNAMENTAL HORTICULTURE  
(PRODUCTION, PROCESSING,  
MARKETING, AND SERVICES)

Organized subject matter and practical experiences concerned with the culture of plants used principally for ornamental or esthetic purposes. Instruction emphasizes knowledge and understanding important to establishing, maintaining, and managing ornamental horticulture enterprises. Subject matter and experiences are organized under descriptive titles such as Arboriculture, Floriculture, Greenhouse Operation and Management, Turf Management, and other ornamental horticulture.

01.05 01 00 00 Arboriculture

Organized subject matter and practical experiences concerned with the principles and practices involved in the culture and maintenance of woody plants used for decoration and shade purposes.

01.05 02 00 00 Floriculture

Organized subject matter and practical experiences concerned with the principles and practices involved in field or greenhouse production of flowers and the arrangement of such flowers for ornamental purposes. (See also 04.05 00 00 00 *Floristry* under DISTRIBUTIVE EDUCATION.)

01.05 03 00 00 Greenhouse Operation and  
Management

Organized subject matter and practical experiences concerned with the principles and practices involved in producing plants under glass and in other artificial environments, including greenhouse operation, maintenance, and management.

01.05 04 00 00 Landscaping

Organized subject matter and practical experiences concerned with the principles and practices involved in locating, planting, and maintaining turf, plants, shrubs, trees, or devices for the beautification of home grounds and other areas of human habitation and recreation.

01.05 05 00 00 Nursery Operation and Management

Organized subject matter and practical experi-



## 01 AGRICULTURE--(Continued)

ences concerned with the production of turf, plants, shrubs and/or trees for the purposes of transplanting or propagating the, including nursery operation, maintenance, and management.

### 01.05 06 00 00 Turf Management

Organized subject matter and practical experiences concerned with the principles and practices involved in establishing, managing, and maintaining grassed areas for ornamental and/or recreational purposes.

### 01 05 99 00 00 Other Ornamental Horticulture

Include here other organized subject matter and experiences emphasized in ornamental horticulture which are not listed above (Specify.)

## 01.06 00 00 00 AGRICULTURAL RESOURCES (CONSERVATION, UTILIZATION, AND SERVICES)

A combination of subject matter and planned learning experiences concerned with the principles and processes involved in the conservation and/or improvement of natural resources such as air, forests, soil, water, fish, plants, and wildlife for economic and recreation purposes. Instruction also emphasizes such factors as the establishment, management, and operation of forest lands used for recreational purposes.

### 01.06 01 00 00 Forests

A combination of subject matter and experiences concerned with forests as living communities of plants and animals in which trees are the dominant species. Emphasis is on the multiple use of forest lands and resources.

### 01.06 02 00 00 Recreation

The study of recreation as one of the multiple uses of land, including emphasis of the principles of conservation. Included in instruction are examples of recreation activities which can be established, maintained, and managed, such as fishing, picnicking, hunting, camping, and nature study.

### 01.06 03 00 00 Soil

A combination of subject matter and practical experiences designed to provide opportunities for gaining knowledge and understanding concerning the principles and practices involved in maintaining soil stability and productivity, including the prevention of erosion, pollution, water logging, exhaustion of plant nutrients, and the accumulation of toxic salts.

### 01.06 04 00 00 Wildlife--including game farms and hunting areas

A study of the principles and practices involved in the preservation and/or improvement of wildlife such as game, fowl, and fish.

### 01.06 05 00 00 Water

A combination of subject matter and practical experiences concerned with water-conservation practices such as prevention of soil erosion, sedimentation, other pollution, seepage, and evaporation; flood control; aquatic weed control; and the development, conservation, and management of water supplies for agricultural, domestic, industrial, and recreational purposes.

### 01.06 06 00 00 Air

The study of air pollution, including the effects of agricultural activities on pollution, and the effects of pollution on plants and animals.

### 01.06 07 00 00 Fish--including farms and hatcheries

A combination of subject matter and activities concerned with the propagation, rearing, stocking, and management of fish in public and private waters.

### 01.06 08 00 00 Range

The study of theories, principles, and practices involved in the preservation and/or improvement of natural range lands.

### 01.06 99 00 00 Other Agricultural Resources

Include here other organized subject matter and experiences emphasized in agricultural resources which are not listed above, including emerging occupational areas in this category. (Specify.)

## 01.07 00-00 00 FORESTRY PRODUCTION, PROCESSING, MANAGEMENT, MARKETING, AND SERVICES

A combination of subject matter and experiences concerned with the multiple use of forest lands and resources, including their management and protection.

### 01.07 01 00 00 Forests

(For definition see 01.06 01 00 00 *Forests* under *Agricultural Resources*.)

### 01.07 02 00 00 Forest Protection

A combination of subject matter and activities designed to provide knowledge, understanding, and judgment concerning the behavior of enemies of the forest and their control.

01.07 03 00 00 Logging—harvesting and transporting  
Study, including observation and practical experiences, concerned with the initial collective activities involved in harvesting trees as a crop and in terms of not interfering with other desirable uses of the forest.

01.07 04 00 00 Wood Utilization

Organized subject matter and practical activities concerned with the many wood products of the forest. Emphasis in instruction is on the study of production, selection, grading, and marketing of forest raw material (wood) for multiple uses in conversion to consumer goods, e.g., paper, plywood, wallboard, plastics, and preservative-treated wood products.

01.07 05 00 00 Recreation

(For definition see 01.06 02 00 00 *Recreation* under *Agricultural Resources*.)

01.07 06 00 00 Special Products

Organized subject matter concerned with the production and marketing of special products, e.g., maple syrup, nuts, Christmas trees, and other products. Consideration is given to the great variety of products utilized in their natural states and/or manufactured from such products. The following are representative of special products.

01.07 06 01 00 Christmas Trees

01.07 06 02 00 Maple Syrup

01.07 06 03 00 Nuts

01.07 06 99 00 Other Special Products

Include here other special products emphasized in instruction which are not listed above. (Specify.)

01.07 99 00 00 Other Forestry

Include here other organized subject matter and activities emphasized in forestry which are not listed above. (Specify.)

01.99 00 00 00 OTHER AGRICULTURE

Include here other organized subject matter and experiences emphasized in agriculture which are not listed or classifiable in one of the above categories. (Specify.)

ART

02.00 00 00 00

Art is comprised of the organized body of subject matter or related courses involving primarily visual, tactile, and kinesthetic expression. Included in instruction are the two-dimensional forms such as drawing, painting, or printmaking; the three-dimensional forms such as sculpture or pottery; other spatial concepts such as architecture and design for the performing arts; and the history and theory of art. Emphasis is placed upon the esthetic and creative factors of visual forms.

The Ad Hoc Committee for Art applied the following rationale to the selection of substantive content for placement in the Art subject-matter area: (1) the content was determined by consensus of the committee to be appropriate to art in terms of origin and meaning, (2) subject-matter items could be defined in brief form using only salient descriptive elements; and (3) the various aspects of organized subject matter classified under Art were identifiable by titles which the *ad hoc* committee considered to be most commonly used in current practice.

Opportunities are frequently provided outside of regular class time for pupils to pursue the development of interests, skills, and knowledge in selected aspects of art as an extension of their classwork. These activities, when approved by appropriate school authorities and directed or supervised by qualified adults, are referred to as *cocurricular activities*. They may be designed for the participation of pupils as individuals or in groups. A variety of such activities is identified and classified categorically under 20.00 00 00 00 *Cocurricular Activities* in chapter 5 beginning on page 146; and they are discussed more fully in this chapter beginning on page 242.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included in this subject-matter area are the items of information which identify various subjects in the art areas.

02.01 00 00 00 ART HISTORY AND THEORY

The study of the visual arts from a conceptual point of view including its history, its relation to social

## 02 . ART--(Continued)

and psychological conditions, to philosophic positions, and to other humanistic disciplines. Art concepts are treated under a variety of descriptive titles such as Art History, Art Theory, Humanities, and other art history and theory.

### 02.01 01 00 00 Art History

The study of the history and evolution of art forms and symbols and their relationship to other historical data, usually presented in chronological or cultural order. Specific periods of art, including contemporary, may be isolated in specialized courses. The focus might be on sensitivity to the inherent esthetic merits of a work of art as well as its historical significance.

### 02.01 02 00 00 Art Theory

The study of those aspects of philosophy, psychology, sociology, and other disciplines which relate to art topics. Esthetics, criticism, creativity, perception, cultural anthropology, and other relevant social or behavioral studies may be included. This subject matter also applies to the professional education of art teachers and professional museum personnel.

### 02.01 03 00 00 Humanities

The study of selected aspects of art presented in relation to visual and performing arts, literature, and philosophy in their social and historical concepts. Sometimes aspects of the various subject-matter areas are taught separately but relatedly; in other instances, these aspects of subject matter are fused or integrated with selected content from art forming the core. (See also 05.03 69 00 00 *Humanities* under ENGLISH LANGUAGE ARTS, 06.03 00 00 00 *Humanities* under FOREIGN LANGUAGES, 12.06 00 00 00 *Humanities* under MUSIC, and 15.09 00 00 00 *Humanities* under SOCIAL SCIENCES/SOCIAL STUDIES.)

### 02.01 99 00 00 Other Art History and Theory

Include here other organized subject matter emphasized in art history and theory which is not listed above. (Specify.)

### 02.02 00 00 00 ART STUDIO

A space designed to provide learning situations involving participation by pupils in the visual arts, emphasizing their expressive and creative aspects and

the development of necessary related skills and understanding. Esthetic merit, rather than technical virtuosity, receives primary emphasis. Opportunities for studio experiences are provided under descriptive titles such as Basic Design, Commercial Design, Environmental Design, Crafts, Drawing, Painting, Photography, Printmaking, Sculpture, and other art studio.

### 02.02 01 00 00 Basic Design

A study of the relationships of two- and three-dimensional visual forms, somewhat comparable to the study of the structure of verbal language. The elements and principles affecting visual expression are central. Design is treated under a variety of descriptive course titles.

### 02.02 01 01 00 Two-dimensional Design

The study of the relationships of line, shape, color, movement, and other visual elements when applied to a plane.

### 02.02 01 02 00 Three-dimensional Design

The study of the structural relationships of form, texture, space, movement, light modulation, and other visual elements as they apply to three-dimensional configurations.

### 02.02 02 00 00 Commercial Design

Studies directed toward specific applications of design principles. Commercial design is organized and treated under a variety of titles such as Advertising and Graphic Design, Design for the Performing Arts, Fashion Design, Technical and Medical Illustration, and other commercial design. (Included as 04.00 00 51 00 *Commercial Design* under DISTRIBUTIVE EDUCATION.)

### 02.02 02 01 00 Advertising and Graphic Design

The development of skills necessary in the preparation of visual material suitable for quantity reproduction. Lettering, typography, layout, and illustration are included. Negotiation, bidding, and cost estimating may also be taught.

### 02.02 02 02 00 Design for the Performing Arts

The study of design and production of sets, costumes, props, and other accouterments of the performing arts. Work with theatrical productions is essential.

### 02.02 02 03 00 Fashion Design

The study and development of skills and

processes involved in the design of apparel. Textile and clothing industries may be taught.

02.02 02 04 00 Technical and Medical Illustration

The development and use of skills and processes involved in creating illustrations relating to industrial, scientific, or medical subjects. Study in science, industrial technology, and/or associated medical areas is frequently included in the development of knowledge and skills necessitating advanced study.

02.02 02 99 00 Other Commercial Design

Include here other organized subject matter and experiences emphasized in commercial design which are not listed above. (Specify.)

02.02 03 00 00 Environmental Design

The development of environmental sensitivity and the application of principles of spatial and structural design to the problems of creating structural elements and to products that man creates to adapt, alter, and control his surroundings.

02.02 03 01 00 Architectural Design

The study of organization and enclosure of space for functional and esthetic purposes. The relationships of color, texture, volume, space, shape, and site are emphasized. Specialized sequences and related studies in engineering and technology are essential.

02.02 03 02 00 Industrial and Product Design

The study of, with central emphasis on, the integration of esthetic quality with industrial technology. The nature of materials and industrial processes, the functional characteristics of the product, consumer psychology, and rudimentary engineering skills are included in planning and design.

02.02 03 03 00 Interior Design

The planning of color, form, space, and textural elements for interiors, emphasizing esthetic consideration. The selection and relationship of furniture, furnishings, communications, traffic, and utilities are also included. The close relationship to the architecture and landscape is implicit.

02.02 03 04 00 Landscape Architecture

The application of design principles to the functional and esthetic problems of altering, adapting, and controlling the external environment. Supporting studies in related areas are necessary, e.g., horticulture, civil engineering, finance, sociology, and social psychology.

02.02 03 05 00 Urban Planning

Study involving the planning and design of cities and towns, or portions thereof, emphasizing the integration of functional and esthetic aspects of the urban environment.

02.02 03 99 00 Other Environmental Design

Include here other organized subject matter and experiences emphasized in environmental design which are not listed above. (Specify.)

02.02 04 00 00 Crafts

Activities for pupils which are planned to emphasize the conception and production of "objects designed for use." Design quality and esthetic and creative factors are emphasized. Consideration of function and technique, while important, is subordinated to these activities. Craft activities are designed under a variety of descriptive titles such as Metalwork and Jewelry, Pottery and Ceramics, Textiles, and other crafts.

02.02 04 01 00 Metalwork and Jewelry

Study and activities which involve the techniques of metalwork and jewelry such as brazing, soldering, forging, casting, finishing, and other techniques.

02.02 04 02 00 Pottery and Ceramics

Study and activities concerned with the forming, firing, glazing, and other finishing, processes of ceramic ware. Clay composition and glaze chemistry may be taught.

02.02 04 03 00 Textiles

Activities in which the central concern is weaving, printing, and creating new forms in fiber and other material. The utilization of the product is not normally an important element.

02.02 04 99 00 Other Crafts

Include here other crafts which are emphasized for study, e.g., wood, leather, enameled metal, glass, and other materials. (Specify.)

02.02 05 00 00 Drawing

The process of producing work in a variety of wet or dry media including, among others, pencil, pen or brush and ink, crayon, chalk, or mixed media, usually nonchromatic. Drawing experiences may emphasize a particular medium or specialized subject matter.

## 02 ART--(Continued)

### 02.02 06 00 00 Painting

The process of producing work in a variety of media such as oils, water color, tempera, casein, synthetics, and mixed media. Painting experiences may emphasize a particular medium or specialized subject matter.

### 02.02 07 00 00 Photography and Related Media

The process of producing work in photographic and related media emphasizing, in addition to technical aspects, the artistic elements which distinguish this work from similar offerings in journalism, science, or vocational education. Specialized studies may be offered in still or motion pictures, television, and other electronic equipment.

### 02.02 08 00 00 Printmaking

The process of printmaking, including intaglio, relief, planographic, and stencil operations. Etching, engraving, lithography, wood and linoleum cuts, silk screen, calligraphy, and allied techniques are included in this category. These activities do not include industrial printing.

### 02.02 09 00 00 Sculpture

The conception and creation of expressive forms by means of modeling, forming, carving, and constructing. Media may include clay, wood, stone, metal, wax, plaster, synthetics, found objects, and others.

### 02.02 99 00 00 Other Art Studio

Include here other techniques or media emphasized in art studio which are not listed or classifiable under one of the major categories listed above, including emerging art concepts. (Specify.)

### 02.09 00 00 00 OTHER ART

Include here other organized subject matter and experiences emphasized in art which are not listed or classifiable under one of the major categories listed above, including emerging art concepts. (Specify.)

## BUSINESS

### 03.00 00 00 00

Business includes the body of related subject matter, or related courses, and planned learning experiences which are designed to develop in pupils the

attitudes, knowledge, skills, and understanding concerned with business principles and practices having applications for personal use and/or activities in the business world. Business also includes a wide variety of aspects of general education, e.g., subject matter from other subject areas such as English (language arts), social sciences/social studies, and mathematics.

The *Ad hoc* Committee for Business applied the following criteria to the selection of substantive content for placement in the Business subject-matter area: (1) the content was determined by consensus of the committee to be unique to business historically and in origin; (2) subject-matter items could be defined in brief form using only salient descriptive elements; and (3) the various aspects of organized subject matter classified under Business were identifiable by titles which were considered to be most commonly used in current practice.

Opportunities are frequently provided both during and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of business as an integral part of the instructional program. As an example, the Future Business Leaders of America provides additional opportunities to develop leadership, other qualities, and an understanding of the world of work in business. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. They may be designed for participation of pupils as individuals or in groups, and are an integral part of classwork. A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146; and they are described more fully in this chapter beginning on page 242. As an illustration, the Future Business Leaders of America is identified for reporting purposes and further described under Cocurricular Activities as Item 20.01 10 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series--Evaluation and Curriculum Improvement on pages 71-78, and the items classified in the X 32 00. Series--School Services Supporting Instruction on pages 90-96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included under this heading are the items of information which identify various subjects in business.

### 03.01 00 00 00 ACCOUNTING

Organized subject matter and learning activities which are designed to provide opportunities for pupils

to develop knowledge, understanding, and skills concerned with the principles and theory of accounting, and accounting practices. Different aspects of accounting are organized for instruction under various descriptive titles, such as Accounting Principles, Accounting Systems, Advanced Accounting, Cost Accounting, Data Processing Accounting, Governmental and Institution Accounting, Income Tax Accounting, Intermediate Accounting, Payroll Accounting, Secretarial Accounting, and other accounting. (Included as 04.00 00 85 00 *Accounting* under DISTRIBUTIVE EDUCATION.) (See also the category 14.01 00 00 00 *Accounting and Computing Occupations* and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

### 03.01 01 00 00 Accounting Principles

Subject matter and learning experiences which are designed to introduce pupils to the general principles of accounting. Usually included for study are theory and practice of accounting and their application to, for example, proprietorships, partnerships, and corporations, problems in recording transactions, payroll and tax transaction procedures, procedures in depreciation and accrual accounting, and preparation and analysis of financial statements. (See also the category 14.01 00 00 00 *Accounting and Computing Occupations* under OFFICE OCCUPATIONS.)

### 03.01 02 00 00 Accounting Systems

An organization of subject matter and learning experiences designed to prepare pupils to analyze accounting systems and procedures and to devise and recommend improvements for existing systems. Usually included in the study of automatic data processing and its application to the accounting system. (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations* and 14.02 00 00 00 *Business Data Processing Systems Occupations* under OFFICE OCCUPATIONS.)

### 03.01 03 00 00 Advanced Accounting

An organization of subject matter and learning activities concerned with the refinement and expansion of accounting theory and procedures with emphasis being placed on a variety of special problems dealing with such considerations as partnerships, proprietorships, and corporations, and installments, consignments, budgeting, depreciation and depletion, governmental accounting, consolidated statements, taxes, liquidation, receiverships, and actuarial science. (See

also the categories 14.01 00 00 00 *Accounting and Computing Occupations* and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

### 03.01 04 00 00 Auditing

The study of the concepts, objectives, and ethics applicable to auditing (the examination of accounts), including audit plans, internal control, sampling, and specific auditing procedures concerned with such items as cash, investments, receivables, inventories, plant, equipment, expenses, and writing an audit report. (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations* and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

### 03.01 05 00 00 Cost Accounting

The study of procedures and practices involved in accounting for materials, labor, overhead, and burden under job-order, including various systems of cost accounting, accounting related to sales, and accounting as a managerial tool of control. (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations*, 14.02 00 00 00 *Business Data Processing Systems Occupations*, and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

### 03.01 06 00 00 C.P.A. Review

The study of accounting standards, concepts, and principles, and their applications in practice. Special attention is given to the AICPA examinations.

### 03.01 07 00 00 Data Processing Accounting

Subject matter and learning activities which involve the use of modern data processing procedures and equipment in financial activities, with special emphasis being placed on systems, including the use of punchcard equipment, common-language devices, accounting machines, and computers. In practice, special applications are made to inventory control, payroll procedures, customer accounts, billing procedures, and storage and retrieval of information. (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations* and 14.02 00 00 00 *Business Data Processing Systems Occupations* under OFFICE OCCUPATIONS.)

### 03.01 08 00 00 Government and Institutional Accounting

### 03 BUSINESS--(Continued)

The study of accounting procedures and principles as applied to fund accounting for governmental units, accounting for nonprofit institutions, and budget control in these institutions. (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations* and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

#### 03.01 09 00 00 Intermediate Accounting

Usually, an organization of subject matter and learning experiences which are designed to provide (1) a systematic review of fundamental accounting processes, and (2) applications of accounting principles to major accounting problems such as assets, liabilities, working capital, the balance sheet, the income statement, the analysis of statements, and stockholders' equity. (See also the category 14.01 00 00 00 *Accounting and Computing Occupations* under OFFICE OCCUPATIONS.)

#### 03.01 10 00 00 Managerial Accounting

The study of accounting analysis information and techniques which are utilized by management in its decisionmaking responsibilities and activities. (See also the category 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

#### 03.01 11 00 00 Payroll Accounting

A combination of subject matter and learning activities which apply to payroll accounting procedures and control, including the study of Federal and State laws and their interpretations and the preparation of reports required by governmental agencies. In practice, payroll accounting is frequently a part of bookkeeping or office practice courses, and includes recording wages, computing payrolls and payroll deductions, and recording payroll entries. (See also the category 14.01 00 00 00 *Accounting and Computing Occupations* under OFFICE OCCUPATIONS.)

#### 03.01 12 00 00 Secretarial Accounting

A study of accounting and bookkeeping fundamentals designed primarily for stenographers and secretaries. Included for study are various accounting/bookkeeping activities, i.e., single and double-entry bookkeeping, payroll procedures, petty cash, records for merchandising, records for various professional services, income statements, taxes, and other financial

reports. (See also 14.08 01 00 00 *Administrative Assistants* under OFFICE OCCUPATIONS.)

#### 03.01 13 00 00 Tax Accounting

The study of accounting principles, procedures, and regulations applicable to the maintenance of records and the preparation and filing of income tax returns for individuals, partnerships, corporations, and other types of organizations. Sometimes State and local tax laws and procedures are included in addition to the study and interpretation of Federal income tax legislation. (See also the category 14.01 00 00 00 *Accounting and Computing Occupations* under OFFICE OCCUPATIONS.)

#### 03.01 99 00 00 Other Accounting

Include here other organized subject matter and activities emphasized in accounting which are not classified above. (Specify.)

### 03.02 00 00 00 ADVERTISING AND SALES PROMOTION

(For definition see 04.00 00 44 00 *Advertising and Sales Promotion* under DISTRIBUTIVE EDUCATION.)

#### 03.02 01 00 00 Advertising Principles

(For definition see 04.00 00 45 00 *Advertising Principles* under DISTRIBUTIVE EDUCATION.)

#### 03.02 02 00 00 Advertising Copywriting

(For definition see 04.00 00 47 00 *Advertising Copywriting* under DISTRIBUTIVE EDUCATION.)

#### 03.02 03 00 00 Advertising Media and Campaigns

(For definition see 04.00 00 46 00 *Advertising Campaigns* and 04.00 00 49 00 *Advertising Media* under DISTRIBUTIVE EDUCATION.)

#### 03.02 04 00 00 Direct-Mail Advertising

(For definition see 04.00 00 52 00 *Direct-Mail Advertising* under DISTRIBUTIVE EDUCATION.)

#### 03.02 99 00 00 Other Advertising and Sales Promotion

Include here other organized subject matter and activities emphasized in advertising and sales promotion which are not classified under DISTRIBUTIVE EDUCATION. (Specify.)

### 03.03 00 00 00 BOOKKEEPING

The study of the fundamental principles involved in the preparation and maintenance of financial records concerned with business management and operations. Emphasis is placed on various records such as budgets, payrolls, and financial statements. In practice, pupils usually are provided opportunities to gain limited experience in the use of selected office machines. Subject matter and activities in bookkeeping are treated under various descriptive titles such as Bookkeeping, First Course, Bookkeeping, Second Course, Bookkeeping, Third Course, Bookkeeping, Fourth Course, Machine Bookkeeping, Payroll Record Keeping, Record Keeping, and other bookkeeping.

#### 03.03 01 00 00 Bookkeeping, First Course

A combination of subject matter and learning experiences concerned with the elementary principles of bookkeeping, including some theory of accounting. In practice, various bookkeeping situations are emphasized in instruction, e.g., single and double-entry bookkeeping, methods and principles of recording business transactions, the preparation of various documents used in recording income, expenses, acquisition of assets, incurrence of liabilities, and changes in equity, and the preparation and some interpretation of financial statements. (See also 14.01 02 00 00 *Bookkeepers* under OFFICE OCCUPATIONS.)

#### 03.03 02 00 00 Bookkeeping, Second Course

Includes repeating the cycle of the first course, expanding the subject matter and enlarging the degree of difficulty. In addition, the pupils are introduced to the simplest forms of partnership and corporation accounting. Actual books, based on simulated companies, transactions, and situations, are used in the learning process. (See also 14.01 02 00 00 *Bookkeepers* under OFFICE OCCUPATIONS.)

#### 03.03 03 00 00 Bookkeeping, Third Course

Organized learning experiences which provide for more extensive treatment of the activities carried on in the first two courses or cycles. New elements on control accounting, subsidiary ledger work, and inventory accounting are usually introduced. (See also 14.01 02 00 00 *Bookkeepers* under OFFICE OCCUPATIONS.)

#### 03.03 04 00 00 Bookkeeping, Fourth Course

Usually, the terminal course in bookkeeping. In practice, provision is frequently made for repeating the cycles of the first three courses. More comprehensive

treatment of specialized types of records, introduction to cost accounting systems, and often relationships simulated activities in data processing affecting bookkeeping are introduced. Increased emphasis is also placed on financial control through bookkeeping and report construction. (See also 14.01 02 00 00 *Bookkeeping* under OFFICE OCCUPATIONS.)

#### 03.03 05 00 00 Machine Bookkeeping

An organization of subject matter and directed activities, often designed as a unit in a bookkeeping or an accounting course, to provide opportunities for pupils to gain experience in the use of bookkeeping machines, usually posting accounts receivable and other control account data. (See also 14.01 04 00 00 *Machine Operators: Billing, Bookkeeping, and Computing* under OFFICE OCCUPATIONS.)

#### 03.03 06 00 00 Payroll Record Keeping

A combination of subject matter and practice activities which are concerned with (1) the study of Federal and State laws that affect payroll, (2) the study of basic payroll forms and records and their uses, (3) practice in calculating hours worked by employees, overtime, gross and net pay, and deductions, and (4) practice in preparing records and the required government reports from the records. (See also the category 14.01 01 00 00 *Accounting and Computing Occupations* under OFFICE OCCUPATIONS.)

#### 03.03 07 00 00 Record Keeping

Subject matter and learning experiences that deal with financial records less technical than those provided in the first and second courses in bookkeeping and which are frequently considered to be on a clerical level. Emphasis is placed on simple, commonly used financial records which often are concerned with personal, family, club, and small business needs. Sometimes the subject matter and experiences serve as a background for enrollees in the first and second courses in bookkeeping as well as a substitute for bookkeeping for those not desiring or not qualified to take technical bookkeeping courses.

#### 03.03 99 00 00 Other Bookkeeping

Include here other organized subject matter and activities emphasized in bookkeeping which are not listed above. (Specify.)

### 03.04 00 00 00 BUDGET CONTROL

The study of the budgetary process in business, e.g., planning for profitable operations, including systems of



### 03 BUSINESS--(Continued)

cost and profit analysis. The primary emphasis is on planning which will expedite the achievement of specific budget-control objectives. (See also the category 14.08 00 00 00 *Supervisory and Administrative Management Occupations*, under OFFICE OCCUPATIONS.)

#### 03.05 00 00 00 BUSINESS ARITHMETIC OR MATHEMATICS

(For definition see 11.05 01 00 00 *Business Arithmetic* under MATHEMATICS.)

#### 03.06 00 00 00 BUSINESS COMMUNICATIONS

The study of oral and written English as they apply to business. The emphasis is on the type of correct and proper English needed by the secretary, stenographer, and clerk, and includes correctness and clarity in style and vocabulary in business correspondence, memorandums, formal and informal reports, and writing minutes. (See also 04.00 00 88 00 *Communications for Distribution* under DISTRIBUTIVE EDUCATION.) (See also the categories 14.04 00 00 00 *Information Communication Occupations*, 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations*, 14.08 00 00 00 *Supervisory and Administrative Management Occupations*, and 14.09 00 00 00 *Typing and Related Occupations* under OFFICE OCCUPATIONS.)

#### 03.06 01 00 00 Business Correspondence

Organized subject matter and activities which are designed to emphasize the writing of business letters, reports, and memorandums. In practice, subject matter and activities frequently include emphasis on both oral and written English which are used in business.

#### 03.06 02 00 00 Report Writing

Learning experiences concerned with the process of investigating and presenting business problems and their solutions, usually including the study of methods of collecting, organizing, and interpreting data, with emphasis upon the elements involved in writing the final report. (Included as 04.00 00 97 00 *Report Writing* under DISTRIBUTIVE EDUCATION.) (See also 14.04 02 00 00 *Correspondence Clerks* under OFFICE OCCUPATIONS.)

#### 03.06 03 00 00 Spelling and Vocabulary Building

The study of words, their definitions, pronun-

ciation, and applications. The activities normally include taking stock of words one knows, and learning to spell new words. The subject matter includes words for general vocabulary and words for the specialized business vocabulary.

#### 03.06 99 00 00 Other Business Communications

Include here other organized subject matter and activities emphasized in business communications which are not listed above. (Specify.)

#### 03.07 00 00 00 BUSINESS ETHICS

The study of morality and its background as a factor determining personal conduct and the consideration of personal and social problems from an ethical point of view. Usually included is the study of society and its influence on policies involved in management, and customer, employer, competitor, and governmental relationships. (This subject matter is also emphasized in various categories under 14.00 00 00 00 OFFICE OCCUPATIONS.)

#### 03.08 00 00 00 BUSINESS FINANCE

An organization of subject matter designed to provide opportunities for pupils to gain knowledge and understanding of the principles of financial management and control as applied to business formation, expansion, reorganization, and liquidation. (See also categories 14.01 00 00 00 *Accounting and Computing Occupations* and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

#### 03.09 00 00 00 BUSINESS LAW

The study of the principles of law as they relate to business transactions and to the individual and his job responsibilities--the rights of individuals and businesses and other individuals and business with whom they deal. Usually, emphases are placed on considerations such as contracts, insurance, loans, sales, negotiable instruments, partnerships, corporations, principal and agent, and property. (Included as 04.10 03 00 00 *Business Law* under DISTRIBUTIVE EDUCATION.) (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations*, 14.05 00 00 00 *Materials Support Occupations*, *transporting, storing, and recording*, and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

#### 03.10 00 00 00 BUSINESS MACHINES

A combination of subject matter and guided

experiences concerned with developing in pupils the knowledge, understanding, and varying degrees of skills related to a variety of machines used in business offices. (See also 14.01 04 00 00 *Machine Operators, Billing, Bookkeeping, and Computing*, and the category 14.03 00 00 00 *Filing, Office Machines, and General Office Clerical Occupations* under OFFICE OCCUPATIONS.) (See also specialized subject listings in the BUSINESS subject-matter area.)

#### 03.10 01 00 00 Business Machines, First Course

Instruction and practice activities which are designed to provide pupils with an introduction to computing machines and opportunities to build acquaintanceship-level skills on adding machines (ten-key and full-key) and on calculating machines (key-driven, rotary, and printing). (See also 14.01 04 00 00 *Machine Operators: Billing, Bookkeeping, and Computing* under OFFICE OCCUPATIONS.)

#### 03.10 02 00 00 Business Machines, Second Course

An extension of the learning and practice activities carried on in Business Machines, First Course with emphasis on developing job skills on computing machines—adding machines and calculators—and specific applications to business documents and procedures. (See also 14.01 04 00 00 *Machine Operators: Billing, Bookkeeping, and Computing* under OFFICE OCCUPATIONS.)

#### 03.10 03 00 00 Calculating and Listing Machines

(For definition see 14.01 04 00 00 *Machine Operations: Billing, Bookkeeping, and Computing* under OFFICE OCCUPATIONS.)

#### 03.10 04 00 00 Duplicating Machines

Subject matter and practice activities, frequently organized as a unit in office practice, designed to provide skills development in the use of various types of reproducing machines, e.g., spirit, stencil, and photocopy duplicating machines. (See also 14.03 01 00 00 *Duplicating Machine Operators* under OFFICE OCCUPATIONS.)

#### 03.10 99 00 00 Other Business Machines and Appliances

Include here other subject matter and activities emphasized in business machines and appliances which are not listed above. (Specify.)

#### 03.11 00 00 00 BUSINESS PSYCHOLOGY

The study of superior-subordinate behavior inter-

actions and the influence of group attitudes as they relate to the specific work environments. Subject matter usually includes interpersonal relationships between peers and superiors, personality acknowledgment, requirements for morale, personal efficiency, and leadership by example. (See also 04.10 12 00 00 *Human Relations* under DISTRIBUTIVE EDUCATION.) (See also the category 14.06 00 00 00 *Personnel, Training, and Related Occupations* under OFFICE OCCUPATIONS.)

#### 03.12 00 00 00 BUSINESS STATISTICS

The study of the elementary aspects of statistics and their applications to business, e.g., tables, charts, ratios, percentages, averages, statistical data, realities, dispersion, skewness, time series, trends, indexes, forecasting, and correlations. (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations*, 14.02 00 00 00 *Business Data Processing Systems Occupations*, 14.05 00 00 00 *Materials Support Occupations: transporting, storing, and recording*, and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

#### 03.13 00 00 00 OFFICE WORK EXPERIENCE

Planned educational activities designed to permit application, in a realistic situation, of background and skill knowledge previously learned through: cooperative programs with an approved teacher-coordinator in the business community; directed experience programs providing systematic supervision of the pupil learning situation in or out of school; or simulated programs providing realistic classroom work experience directed by a qualified teacher.

#### 03.14 00 00 00 CLERICAL PRACTICE

Learning situations involving laboratory and discussion experiences which are designed to provide opportunities for pupils, not interested in or not pursuing secretarial or bookkeeping knowledge and skills, to develop knowledge and skills in clerical operations. Emphasis is on various activities e.g., filing, record keeping, sometimes advanced typing, telephone and telegraph usage, mailroom activities, shipping procedures, personality development, machine operation, and job-application procedures. (See also the category 14.03 00 00 00 *Filing, Office Machines, and General Office Clerical Occupations* under OFFICE OCCUPATIONS.)

### 03 BUSINESS--(Continued)

#### 03.15 00 00 00 CONSUMER EDUCATION

(For definition see 15.05 00 00 00 *Consumer Education* under SOCIAL SCIENCES/SOCIAL STUDIES.)

#### 03.16 00 00 00 CREDIT AND COLLECTIONS

(For definition see 04.00 00 28 00 *Credit and Collections* under DISTRIBUTIVE EDUCATION.)

#### 03.17 00 00 00 DATA PROCESSING AND COMPUTER OPERATION

Learning activities concerned with surveying and studying the rapidly growing need for and uses of electronic data processing systems in the business office, and the implications for management, including the analysis and study of concepts of computer operations. (See also the category 14.02 00 00 00 *Business Data Processing Systems Occupations* under OFFICE OCCUPATIONS.)

#### 03.17 01 00 00 Introduction to Data Processing

Instruction which is designed to provide opportunities for pupils to become acquainted with developments in data processing—concepts, procedures, understanding, and processing, electro-mechanical or electronic machines. Usually, various methods such as manual, machine, punched-card, and electronic are studied. Simple applications are made to payrolls, inventory, customer records, and billing. This is sometimes a separate course when equipment is available, or it is often a part of an office practice or bookkeeping course when equipment is not available. (See also the category 14.02 00 00 00 *Business Data Processing Systems Occupations* under OFFICE OCCUPATIONS.)

#### 03.17 02 00 00 Data Processing Systems

The study of data systems and procedures such as the analysis, design, and control of management information and data communications systems. Other aspects of data processing systems frequently emphasized are: (1) the economics of manual, electro-mechanical, and electronic data processing; (2) the advantages and limitations of computers, communication, and information retrieval systems as tools for management control; (3) feasibility study techniques, evaluation equipment, and conversion techniques, and (4) installation, organization, and operation of a computer facility. (See also the category 14.02 00 00 00 *Business Data Processing Systems Occupations* under OFFICE OCCUPATIONS.)

#### 03.17 03 00 00 Computer - Oriented Mathematics (Data Processing Mathematics)

Instruction which is concerned with a practical foundation in numerical concepts needed for understanding accounting and machine processes. Subject matter and learning experiences usually are designed to provide knowledge of rotation, number systems, number systems with an arbitrary base, basic algebra, linear equations, fixed floating point numbers, elements of Boolean algebra, methods of numerical computation, and use of the computer for numerical computation. (See also 11.08 00 00 00 *Computer Mathematics* under MATHEMATICS.)

#### 03.17 04 00 00 Computer Programming

Learning activities designed to provide practice in flow charting and writing instruction in computer language for the direction of computer operation in the solution of a problem. Usually, subject matter includes program preparation steps, types of instruction, coding, flow charting and block diagramming, number systems, address systems, computer word format, housekeeping, running, and error detection. (See also 14.02 03 00 00 *Programmers* under OFFICE OCCUPATIONS.) (Included as 16.04 01 00 00 *Computer and Console Operators* under OFFICE OCCUPATIONS.)

#### 03.17 05 00 00 Computer Operation: Introduction

The study of the principles of computer operation with emphasis on components and functions of a computer system, input-output media, central processing units, internal processing procedures, console and inquiring functions, and programming elements. Instruction is usually designed to enable pupils to gain "in-depth" knowledge of computer applications and characteristics. (See also 14.02 01 00 00 *Computer and Console Operators* under OFFICE OCCUPATIONS.)

#### 03.17 06 00 00 Processing Equipment Operation

Learning experiences concerned with the operation of electrical/mechanical equipment, e.g., key-punch machines, accounting machines, collators, key sorters, and printer—either independently or in support of and/or auxiliary to the electronic data computer. (See also 14.02 02 00 00 *Peripheral Equipment Operators* under OFFICE OCCUPATIONS.)

#### 03.17 06 01 00 Punched Card Data Processing

An organization of subject matter and activities which is designed to provide opportunities for

pupils to gain knowledge and experiences concerned with the use of punched card equipment, including basic machine operation, board wiring, and typical applications. (See also 14.02 02 01 00 *Keypunch and Coding Equipment Operators* under OFFICE OCCUPATIONS.)

03.17 06 02 00 Tabulating Equipment Operation

Organized learning experiences designed to provide opportunities for pupils to gain knowledge and understanding about the punched-card system of data processing, including all peripheral equipment. Subject matter usually includes the punched card, machine functions, machine components, keypunch and verifier, interpreter, sorter, reproducer, collator, accounting machine-tabulator, calculator, basic house-keeping procedures, equipment used as computer support, and accounting applications. (See also 14.02 02 00 00 *Peripheral Equipment Operators* under OFFICE OCCUPATIONS.)

03.17 06 03 00 Tabulating Machine Wiring

Instruction which is concerned with the wiring of control panels that direct the operation of punched-card equipment. Subject matter usually includes machine logic, principles of control panel wiring, wiring fundamentals, and wiring practice. (See also 14.02 02 00 00 *Peripheral Equipment Operators* under OFFICE OCCUPATIONS.)

03.17 06 99 00 Other Processing Equipment Operation

Include here other subject matter and experiences emphasized in processing equipment operation not listed above. (Specify.)

03.17 99 00 00 Other Data Processing and Computer Operation

Include here other subject matter and activities emphasized in data processing and computer operation which are not listed above, e.g., tape library systems, job scheduling, and job control. (See also 14.02 99 00 00 *Other Business Data Processing Systems Occupations* under OFFICE OCCUPATIONS.) (Specify.)

03.18 00 00 00 ECONOMICS

(For definition see 15.06 00 00 00 *Economics* under SOCIAL SCIENCES/SOCIAL STUDIES.)

03.18 01 00 00 Consumer Economics

(For definition see 15.06 03 00 00 *Consumer*

*Economics* under SOCIAL SCIENCES/SOCIAL STUDIES.)

03.18 02 00 00 Labor Economics

(For definition see 15.06 08 00 00 *Resource Economics* under SOCIAL SCIENCES/SOCIAL STUDIES.)

03.18 03 00 00 Money and Banking

(For definition see 15.06 05 00 00 *Money and Banking* under SOCIAL SCIENCES/SOCIAL STUDIES.)

03.18 04 00 00 Principles of Economics

(For definition see 15.06 07 00 00 *Principles of Economics* under SOCIAL SCIENCES/SOCIAL STUDIES.)

03.18 99 00 00 Other Economics

Include here other subject matter emphasized in economics which is not listed above or classified under SOCIAL SCIENCES/SOCIAL STUDIES. (Specify.)

03.19 00 00 00 ECONOMIC GEOGRAPHY

(For definition see 15.07 02 00 00 *Human Geography* and 15.07 04 00 00 *Regional Geography* under SOCIAL SCIENCES/SOCIAL STUDIES.)

03.20 00 00 00 EXPLORATORY BUSINESS

An organization of subject matter and activities designed to assist the pupil in determining the extent of his interest in and aptitude for activities related to business employment. Emphasis is usually on limited skill objectives in shorthand, selling, bookkeeping and clerical duties.

03.21 00 00 00 FILING

Learning experiences which provide opportunities for pupils to study the principles of indexing and the various methods of filing used in business and other institutions, including actual practice in indexing and filing. (See also 14.03 02 00 00 *File Clerks* under OFFICE OCCUPATIONS.)

03.22 00 00 00 FILING AND RECORD CONTROL

Subject matter and learning experiences which are concerned with the extension and more advanced study of the elementary aspects of indexing and filing described in *Filing*. In practice, emphasis is frequently on a wide range of study and experiences such as filing systems and their management, storage, and retrieval of business records, rules of indexing, evaluation of

### 03 BUSINESS--(Continued)

various methods of filing, uses of filing equipment and supplies, automated filing procedures, the operation of an efficient records system, including forms design, and transfer and disposition of records. (See also 14.03 03 00 00 *General Office Clerks* under OFFICE OCCUPATIONS.)

#### 03.23 00 00 00 GENERAL BUSINESS OR INTRODUCTION TO BUSINESS

Subject matter designed to make available to all pupils an introductory study of business, including (1) an understanding and appreciation of the nature, scope, and functions of the business-economic system in meeting consumer needs and wants, (2) an understanding of economic principles and desirable business practices which should be followed by consumers in the wise handling of their business affairs, and (3) an understanding and appreciation of career opportunities which are to be found in business occupations. This course may have other titles, such as Introduction to Business or Basic Business. The subject matter of this course has value for all pupils as members of the economic community. General Business, providing a higher level of subject matter, is frequently offered in postsecondary instructional programs in business.

#### 03.24 00 00 00 INSURANCE AND RISK

(For definition see 04.13 00 00 00 *Insurance* and 04.00 00 71 00 *Principles of Insurance* under DISTRIBUTIVE EDUCATION.)

##### 03.24 01 00 00 Principles of Insurance

(For definition see 04.00 00 71 00 *Principles of Insurance* under DISTRIBUTIVE EDUCATION.)

##### 03.24 02 00 00 Life Insurance

(For definition see 04.00 00 72 00 *Life Insurance* under DISTRIBUTIVE EDUCATION.)

##### 03.24 03 00 00 Property and Casualty Insurance

(For definition see 04.00 00 73 00 *Casualty Insurance* and 04.00 00 74 00 *Property Insurance* under DISTRIBUTIVE EDUCATION.)

##### 03.24 99 00 00 Other Insurance

Include here other organized subject matter emphasized in insurance which is not listed above or classified under DISTRIBUTIVE EDUCATION.) (Specify.)

#### 03.25 00 00 00 INVESTMENTS

An organization of subject matter concerned with the study of sources of capital, various types of securities, methods of financing, principles of investing, policies of investing, and kinds of financial and investment institutions.

#### 03.26 00 00 00 BUSINESS AND MANAGEMENT PRINCIPLES

The study of planning, organizing, and controlling a business, including both the organizational and human aspects, often with emphasis on various theories of management, the purpose of which is to develop in pupils the knowledge and understanding necessary for managing people and functions and making decisions. (See also specific subject-matter categories in the subject-matter areas of BUSINESS and DISTRIBUTIVE EDUCATION.) (See also 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

##### 03.26 01 00 00 Business Principles

An organization of subject matter designed to help pupils gain knowledge and understanding important to starting a small business or becoming a more productive employee. Frequently emphasized are considerations such as (1) organizing, financing, and managing a business, and (2) principles of purchasing, selling, merchandising, recordkeeping, granting credit, and collecting. (See also the categories 14.01 00 00 00 *Accounting and Computing Occupations: transporting, storing, and recording*, and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

##### 03.26 02 00 00 Business Organization and Management

An organization of subject matter concerned with a wide range of considerations in the field of managing businesses, including the organizational aspects, managerial problems, financing, labor, government regulations, layout, control of materials, cost control, production and marketing, buying and pricing, and related problems. (See also the category 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

##### 03.26 03 00 00 Labor - Management Relations

The study of the history and development of the labor movement, including an analysis and interpre-

tation of Federal and State legislation, union contracts, labor negotiation, conciliation, arbitration, and grievance procedures. (See also the categories 14.06 00 00 00 *Personnel, Training, and Related Occupations* and 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

03.26 04 00 00 Merchandising Management  
(For definition see 04.00 00 29 00 *Marketing Management, General* under DISTRIBUTIVE EDUCATION.)

03.26 05 00 00 Office Management and Supervision  
An organization of subject matter designed for a study of scientific principles of office procedures records, and personnel. Emphasis are placed on a wide range of considerations including organization of the office; layout, selection and use of equipment; psychological problems; planning, selection, and training of personnel; policies and procedures, management of accounting activities; work simplification, office manuals and reports; and data processing functions. (See also the category 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

03.26 06 00 00 Personnel Management  
(For definition see 04.00 00 31 00 *Personnel Management* under DISTRIBUTIVE EDUCATION.)  
(See also the category 14.08 00 00 00 *Supervisory and Administrative Management Occupations* under OFFICE OCCUPATIONS.)

03.26 07 00 00 Small Business Management  
(For definition see 04.00 00 33 00 *Small Business Management* under DISTRIBUTIVE EDUCATION.)

03.26 99 00 00 Other Business and Management Principles  
Include here other organized subject matter emphasized in business and management principles which is not listed above or classified under DISTRIBUTIVE EDUCATION or OFFICE OCCUPATIONS. (Specify.)

03.27 00 00 00 MARKETING  
(For definition see 04.00 00 38 00 *Marketing Research* under DISTRIBUTIVE EDUCATION.)

03.27 01 00 00 Principles of Marketing,

(For definition see 04.00 00 10 00 *Principles of Marketing* under DISTRIBUTIVE EDUCATION )

03.27 02 00 00 Industrial Marketing  
(For definition see 04.00 00 12 00 *Industrial Marketing* under DISTRIBUTIVE EDUCATION.)

03.27 03 00 00 International Marketing  
(For definition see 04.00 00 13 00 *International Marketing* under DISTRIBUTIVE EDUCATION.)

03.27 99 00 00 Other Marketing  
Include here other organized subject matter emphasized in marketing which is not listed above or classified under DISTRIBUTIVE EDUCATION. (Specify.)

03.28 00 00 00 OFFICE PRACTICE  
Learning experiences which are usually designed to include (1) a combination of knowledge and skills gained in other business education courses, and (2) increased emphases on solving business problems and simulated experiences of working in the various departments of a business, e.g., purchases, sales, and book-keeping. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)

03.29 00 00 00 PERSONAL DEVELOPMENT AND HUMAN RELATIONS  
Learning experiences designed for improving self-management and enhancing social and job performance. Emphasis is on improving study and work habits, qualities of leadership, grooming and personal appearance, and the analysis of personality deficiencies and ways of overcoming them.

03.30 00 00 00 PERSONAL FINANCE  
Subject matter concerned with the study of everyday personal financial problems including such aspects as budgeting, borrowing, charge accounts, installment buying, insurance, savings, investments, pensions, social security, home ownership, banking, taxes, wills, and estates.

03.31 00 00 00 REAL ESTATE  
(For definition see 04.17 00 00 00 *Real Estate* under DISTRIBUTIVE EDUCATION.)

03.31 01 00 00 Principles of Real Estate  
(For definition see 04.00 00 75 00 *Real*

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*Estate Principles* under DISTRIBUTIVE EDUCATION.)

03.31 02 00 00 Real Estate Appraisal  
(For definition see 04.00 00 79 00 *Real Estate Appraisal* under DISTRIBUTIVE EDUCATION.)

03.31 03 00 00 Real Estate Finance  
(For definition see 04.00 00 80 00 *Real Estate Finance* under DISTRIBUTIVE EDUCATION.)

03.31 04 00 00 Real Estate Law  
(For definition see 04.00 00 78 00 *Real Estate Law* under DISTRIBUTIVE EDUCATION.)

03.31 05 00 00 Real Estate Management  
(For definition see 04.00 00 77 00 *Real Estate Management* under DISTRIBUTIVE EDUCATION.)

03.31 06 00 00 Real Estate Sales  
(For definition see 04.00 00 81 00 *Real Estate Sales* under DISTRIBUTIVE EDUCATION.)

03.31 99 00 00 Other Real Estate  
Include here other organized subject matter emphasized in real estate which is not listed above or classified under DISTRIBUTIVE EDUCATION. (Specify.)

03.32 00 00 00 RETAILING  
(For definition see 04.00 00 05 00 *Retailing* under DISTRIBUTIVE EDUCATION.)

03.32 01 00 00 Merchandise Information (Product Information)  
(For definition see 04.00 00 82 00 *Product Information* under DISTRIBUTIVE EDUCATION.)

03.32 02 00 00 Retail Display  
(For definition see 04.00 00 54 00 *Retail Display* under DISTRIBUTIVE EDUCATION.)

03.32 03 00 00 Retail Merchandising (Selling)  
(For definition see 04.00 00 23 00 *Retail Merchandising* under DISTRIBUTIVE EDUCATION.)

03.32 04 00 00 Retail Salesmanship (Selling)  
(For definition see 04.00 00 64 00 *Retail Selling* under DISTRIBUTIVE EDUCATION.)

03.32 05 00 00 Retail Store Management  
(For definition see 04.00 00 32 00 *Retail Store Management* under DISTRIBUTIVE EDUCATION.)

03.32 99 00 00 Other Retailing  
Include here other organized subject matter emphasized in retailing which is not listed above or classified under DISTRIBUTIVE EDUCATION. (Specify.)

03.33 00 00 00 SALESMANSHIP PRINCIPLES  
Planned learning experiences which include a combination of courses and practical experiences concerned with the why, what, how, and when of salesmanship--techniques which will provide information concerning why man is motivated to make purchases. Selling provides opportunity for people with appropriate traits, enthusiastic interests, and eagerness, to apply themselves. (See also 04.00 00 32 00 *Salesmanship* under DISTRIBUTIVE EDUCATION.)

03.33 99 00 00 Other Salesmanship  
Include here other organized subject matter emphasized in salesmanship which is not classified in the major categories above or under DISTRIBUTIVE EDUCATION. (Specify.)

### 03.34 00 00 00 SHORTHAND, STENOGRAPHIC, AND SECRETARIAL

The study of subject matter and the development of skills concerned with the substitution of symbols for letters, syllables, or words normally written in long-hand as a means of achieving rapidity in writing. It also involves the related activities usually associated with transcribing the notes back into the common language through the use of typewriters, and includes the concomitant clerical activities. (See also 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)

03.34 01 00 00 Machine Shorthand  
Learning activities which are designed to provide opportunities for pupils to develop skills in recording dictation through the use of a machine, as contrasted with recording dictation with a pen or pencil. Frequently, high-speed recording is emphasized. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)

03.34 02 00 00 Personal Use Shorthand

Learning activities which are designed to provide opportunities for pupils to study a highly simplified alphabetic or symbol system of shorthand for personal use and to develop skill, through practice, in using it. In addition, instruction usually includes emphasis on taking notes, e.g., when working with printed materials, or listening to lectures, or when participating in discussions or meetings.

#### 03.34 03 00 00 Shorthand Theory, First Course

Study and practice activities concerned with the basic theory of shorthand, including the shorthand alphabet, brief forms, phrasing principles and abbreviating principles, and the development of fluency in writing shorthand outlines. Generally, skills-development objectives include a dictation speed of 60-80 words per minute, and pretranscription techniques such as punctuation, spelling, and word usage are emphasized. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations*, under OFFICE OCCUPATIONS.)

#### 03.34 04 00 00 Shorthand Theory, Second Course

Study and practice activities concerned with the refinement of basic shorthand principles and the extension of the shorthand vocabulary. The course is usually offered during the second half of the first year and provides emphasis on (1) building skill in taking dictation with a speed objective of 80-100 words per minute writing on new and practice materials, and (2) the introduction of transcription on the typewriter. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)

#### 03.34 05 00 00 Shorthand Dictation

Study and practice activities--sometimes called Advanced Shorthand--which usually follow the elementary principles course but which may be introduced in Shorthand, First Course. The purpose of the course is to develop shorthand vocabulary; develop speed, accuracy, and shortcuts in taking dictation; and to develop sustained dictation with ordinary corrections and interruptions simulating office conditions. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)

#### 03.34 06 00 00 Shorthand Speed Building

Study and practice activities designed to develop (1) a high level of dictation skill--up to 140 words per minute, and (2) an expert level of transcrip-

tion skill--up to 50 words per minute. Special dictation involving technical vocabularies such as those of medicine, law, engineering, and science is sometimes included in the course. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)

#### 03.34 07 00 00 Shorthand Transcription

Learning activities which provide for combining the skills of taking dictation on new material and transcribing it rapidly and accurately at the typewriter in mailable form. Considerations are given to special transcription problems such as language structure and style, letter form, transcription shortcuts, vocabulary, punctuation, and general duties of office practice. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)

#### 03.34 08 00 00 Machine Transcription

Study and practice activities concerned with transcribing letters, reports, or other recorded data, using a transcribing (voice reproducing) machine and a typewriter. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)

#### 03.34 09 00 00 Secretarial Practice

Learning activities which include a combination of subject matter and skills development activities designed primarily for pupils who are interested in stenographic or secretarial work. Emphasis is on a variety of knowledge and skills, e.g., refining and improving dictation and transcription skills in an office setting, uses of business machines, personal etiquette and grooming, writing letters and reports for the executive, planning travel itineraries, filing and records management, advanced typewriting, and office hostessing. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)

#### 03.34 10 00 00 Specialized Shorthand Terminology and Transcription (legal, medical, scientific/technical, other)

A course designed to acquaint the pupil with the specialized terminology (legal, medical, scientific/technical, or other) and special shorthand forms of the selected field through the use of shorthand dictation exercises. The presentation includes transcription practice activities combining the specialized shorthand outlines, spelling, pronunciation, and definitions of the



### 03 BUSINESS--(Continued)

most-used specialized terms, with practical application at the typewriter. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)

03.34 10 01 00 Legal

03.34 10 02 00 Medical

03.34 10 03 00 Scientific/Technical

03.34 10 99 00 Other Specialized Shorthand Terminology and Transcription (legal, medical, scientific/technical, other)

Include here other organized subject matter and activities emphasized in specialized shorthand terminology and transcription which are not classified above. (Specify.)

03.34 11 00 00 Specialized Secretarial Practice (legal, medical, scientific/technical)

A combination of subject matter and skills-development activities in the specialized fields of secretarial practice. Emphasis is on the secretarial duties and procedures peculiar to the field, and on refining and improving dictation and transcription skills in the setting of the legal office, the medical office or hospital, or the scientific or technical office or laboratory. (See also the category 14.07 00 00 00 *Stenographic, Secretarial, and Related Occupations* under OFFICE OCCUPATIONS.)

03.34 11 01 00 Legal

03.34 11 01 00 Medical

03.34 11 03 00 Scientific/Technical

03.34 11 99 00 Other Specialized Secretarial Practice (legal, medical, scientific/technical)

Include here other organized subject matter and activities emphasized in shorthand, stenographic, and secretarial which are not listed or classifiable in the above categories. (Specify.)

03.34 99 00 00 Other Shorthand, Stenographic, and Secretarial

Include here other organized subject matter and activities emphasized in shorthand, stenographic,

and secretarial which are not listed or classifiable in the above categories. (Specify.)

#### 03.35 00 00 00 TYPEWRITING

The subject matter and learning activities concerned with (1) typewriters and their manipulative parts, and (2) the development of skills in operating typewriters. (See also the category 14.09 00 00 00 *Typing and Related Occupations* under OFFICE OCCUPATIONS.)

#### 03.35 01 00 00 Personal Typewriting

A combination of subject matter and practice experiences to provide opportunities for pupils to develop knowledge about and skills in typewriting, primarily for personal use. Emphasis is on the attainment of limited skills in typewriting using straight copy, and on composition of original material at the typewriter such as personal correspondence, themes, outlines, and reports.

#### 03.35 02 00 00 Production Typewriting

Planned learning experiences which are concerned with the improvement of basic typewriting techniques and the application of skills to the development of a high degree of speed and accuracy in producing typed materials on an office production basis including letters, envelopes, cards, labels, manuscripts, and other simulated office jobs. (See also 14.09 02 00 00 *Typists* under OFFICE OCCUPATIONS.)

#### 03.35 03 00 00 Typewriting, First Course

Subject matter and practice experiences which are designed to assist the pupil in developing the touch system in typewriting, mastery of the keyboard, and reasonable proficiency in typewriting from straight copy. Emphasis is also on the correct operation of the manipulative parts of the typewriter, techniques in making corrections, how to prepare simple tabular matter, following instructions and solving problems on the typewriter, and skill in using grammar, punctuation, and spelling. In practice, attention is given to such aspects of typing as manuscripts, business letters, tables, and documents. Usually, the speed goal ranges from 35-50 words per minute. (See also 14.09 02 00 00 *Typists* under OFFICE OCCUPATIONS.)

#### 03.35 04 00 00 Typewriting, Second Course

The learning experiences in this course are concerned with the further development of the skills emphasized in Typewriting, First Course, with concen-

tration being on speed and accuracy and production typewriting on a sustained basis. Some attention is given to composition at the machine. In practice, the speed goal ranges from 60-75 words per minute. (See also 14.09 02 00 00 *Typists* under OFFICE OCCUPATIONS.)

### 03.35 99 00 00 Other Typewriting

Include here other subject matter and experiences emphasized in typewriting which are not listed above. (Specify.)

### 03.99 00 00 00 OTHER BUSINESS

Include here other organized subject matter and activities emphasized in business which are not listed or classifiable in one of the above categories. (Specify.)

## DISTRIBUTIVE EDUCATION

### 04.00 00 00 00

Distributive education includes various combinations of subject matter and learning experiences related to the performance of activities that direct the flow of goods and services, including their appropriate utilization, from the producer to the consumer or user. These activities include selling, and such sales-supporting functions as buying, transporting, storing, promoting, financing, marketing research and management.

Distributive education is comprised of programs of occupational instruction in the field of *distribution and marketing*. These programs are designed to prepare individuals to enter, or progress or improve competencies in, distributive occupations. Emphasis is on the development of attitudes, skills and understanding related to marketing, merchandising and management. Instruction is offered at the secondary, postsecondary, and adult education levels and is structured to meet the requirements for gainful employment and entrepreneurship at specified occupational levels. Distributive occupations are found in such areas of economic activity as retail and wholesale trade, finance, insurance, real estate, services and service trades, manufacturing, transportation, utilities, and communications.

The Ad Hoc Committee for Distributive Education applied the following rationale to the selection of the items for placement in the Distributive Education area. (1) the items were determined to be appropriate to distributive education in terms of recent vocational education legislation, (2) the items could be defined in brief form using only salient descriptive elements, and

(3) the various items classified under Distributive Education were identifiable by titles which the *ad hoc* committee considered to be most appropriate to distributive education.

Opportunities to develop leadership, social and civic awareness, and increased understanding of the world of work in distribution and marketing are provided through the Distributive Education Clubs of America, the youth organization for distributive education pupils. As an integral part of the instructional program, pupils engage in activities that extend their interests, skills and knowledges in selected aspects of distribution and marketing. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. A variety of activities is identified under 20.00 00 00 00 *Cocurricular Activities* in chapter 5 beginning on page 146; and they are discussed more fully in this chapter beginning on page 242. The Distributive Education Clubs of America may be identified for reporting purposes under *Cocurricular Activities* as Item 20.01 05 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series *Evaluation and Curriculum Improvement* on pages 71-78 and the items classified in the X 31 00. Series *School Services Supporting Instruction* on pages 90-96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included under this heading are instructional programs in distributive education, classified and identified as Items 04.01 00 00 00 through 04.99 00 00 00. Each of the instructional programs represents various combinations of subject matter. Instructional content may be identified as specific subject-matter or course titles, or, selected aspects of subject matter may be grouped (integrated or correlated). As an example of integrated or correlated subject matter see 04.00 00 01 00 *Distribution I*.

In any instructional program the subject matter emphasized may comprise any combination of the items listed (04.00 00 01 00 through 04.00 00 99 00) following 04.99 00 00 00. An illustration might be: instructional program, 04.02 00 00 00 *Apparel and Accessories*; examples of subject matter might be: 04.00 00 18 00 *Buying*, 04.00 00 23 00 *Retail Merchandising*, and 04.00 00 36 00 *Advertising Principles*.

### 04.01 00 00 00 ADVERTISING SERVICES

Organized subject matter and learning experiences

which provide lodging, lodging and meals, convention facilities, and other services on a year-round or seasonal basis to the general public or to an organization's membership.

#### 04.12 00 00 00 INDUSTRIAL MARKETING

Organized subject matter and learning experiences related to the tasks performed by sales and management personnel in establishing market potentials and selling goods and services to business and institutional buyers for use in their operations.

#### 04.13 00 00 00 INSURANCE

Organized subject matter and learning experiences related to the tasks performed by sales and management personnel for insurance carriers of all types, or by agents representing carriers and brokers dealing in the sale or placement of insurance contracts with carriers. (Comprises portion of definition of 03.24 00 00 00 *Insurance and Risk* under BUSINESS.)

#### 04.14 00 00 00 INTERNATIONAL TRADE

Organized subject matter and learning experiences related to the tasks performed by distributive employees and management personnel in a variety of business establishments concerned with export sales, trade controls, foreign operations, attitudes, monetary problems, and other elements in international marketing.

#### 04.15 00 00 00 PERSONAL SERVICES

Organized subject matter and learning experiences related to the tasks performed by sales and management personnel in establishments primarily engaged in providing services. Generally, these services are concerned with personal improvement and the care of a person or his apparel. Included in this category are laundries and drycleaning establishments, shoe repair shops, funeral homes, photographic studios, and dance or art studios.

#### 04.16 00 00 00 PETROLEUM

Organized subject matter and learning experiences related to the variety of sales and sales-supporting tasks performed by distributive employees and management personnel in retail or wholesale establishments engaged in the distribution of petroleum products.

#### 04.17 00 00 00 REAL ESTATE

Organized subject matter and learning experiences related to tasks performed by persons who act for themselves or as agents for others in real estate

brokerages or other firms engaged in buying, selling, appraising, renting, managing, and leasing of real property. (Included as 03.31 00 00 00 *Real Estate* under BUSINESS.)

#### 04.18 00 00 00 RECREATION AND TOURISM

Organized subject matter and learning experiences related to the variety of sales, counseling and sales-supporting tasks performed by distributive employees and management personnel in establishments primarily engaged in providing amusement, recreation, entertainment, recreational supplies and equipment, or travel services. This instructional program also is designed for employees and management personnel engaged in other travel-serving businesses who assume responsibilities for stimulating the local economy through tourism.

#### 04.19 00 00 00 TRANSPORTATION

Organized subject matter and learning experiences related to the physical movement of people, personal effects and products, and the sales, storing, and sales-supporting tasks performed by distributive employees and management personnel in enterprises engaged in passenger and freight transportation, public warehousing, and services incidental to transportation.

#### 04.20 00 00 00 OTHER RETAIL TRADE

Include here other organized instructional programs and learning experiences emphasized in sales and sales-supporting tasks performed by distributive employees and management personnel in establishments engaged in selling merchandise purchased for resale to customers for personal, household, business or farm use, which are not listed above. (Specify.)

#### 04.31 00 00 00 OTHER WHOLESALE TRADE

Include here other instructional programs and learning experience, emphasized in sales and sales-supporting tasks performed by distributive employees and management personnel in places of business engaged primarily in selling goods to retailers, industrial, commercial, institutional and professional users, or bringing buyer and seller together, which are not listed above. (Specify.)

#### 04.99 00 00 00 OTHER INSTRUCTIONAL PROGRAMS

Include here other organized instructional programs and learning experiences, emphasized in marketing functions performed by employees, managers and/or proprietors in establishments engaged in selling products or providing services to individuals and

## 04 DISTRIBUTIVE EDUCATION--(Continued)

related to planning, development, placement, and evaluation tasks performed by distributive employees and management personnel in demand creation, and sales promotion activities utilizing displays, merchandising aids, and mass media in such enterprises as advertising agencies, display houses, retail and wholesale establishments, and production industries.

### 04.02 00 00 00 APPAREL AND ACCESSORIES

Organized subject matter and learning experiences related to the variety of sales, fashion coordination, and sales-supporting tasks performed by distributive employees and management personnel in retail and wholesale establishments primarily engaged in selling clothing of all kinds, including related articles for personal wear and adornment.

### 04.03 00 00 00 AUTOMOTIVE

Organized subject matter and learning experiences related to the variety of sales and sales-supporting tasks performed by distributive employees and management personnel in retail, wholesale, and service establishments engaged in selling, renting, storing or caring for cars and trucks, and in selling automotive parts, accessories, and equipment.

### 04.04 00 00 00 FINANCE AND CREDIT

Organized subject matter and learning experiences related to the tasks performed by distributive employees and management personnel in institutions engaged in deposit banking and related services, extending credit in the form of loans, services allied with the exchange of securities and commodities, or consumer credit and collections.

### 04.05 00 00 00 FLORISTRY

Organized subject matter and learning experiences related to a variety of sales and sales-supporting tasks performed by distributive employees and management personnel in retail and wholesale establishments, cut flowers, growing plants, artificial plants, and related items for ornamental use. (See also 01.05 02 00 00 *Floriculture* under AGRICULTURE.)

### 04.06 00 00 00 FOOD DISTRIBUTION

Organized subject matter and learning experiences related to a variety of sales and sales-supporting tasks performed by distributive employees and management personnel in establishments primarily engaged in selling food for home preparation and consumption, or selling

a general or commodity line of food products at wholesale.

### 04.07 00 00 00 FOOD SERVICES

Organized subject matter and learning experiences related to the sales and sales-supporting tasks performed by distributive employees and management personnel in establishments serving prepared foods and drinks for consumption on their own premises or at a place designated by the customer. (See also 09.02 03 00 00 *Food Management, Production, and Services*, under HOME ECONOMICS, and 17.29 00 00 00 *Quantity Food Occupations* under TRADE AND INDUSTRIAL OCCUPATIONS.)

### 04.08 00 00 00 GENERAL MERCHANDISE

Organized subject matter and learning experiences related to a variety of sales and sales-supporting tasks performed by distributive employees and management personnel engaged primarily in selling various types of merchandise at retail in department stores, junior department stores, variety stores, general merchandise stores, discount stores, and catalog houses.

### 04.09 00 00 00 HARDWARE, BUILDING MATERIALS, FARM AND GARDEN SUPPLIES AND EQUIPMENT

Organized subject matter and learning experiences related to various sales and sales-supporting tasks performed by distributive employees and management personnel in establishments engaged primarily in selling one or more of the following product lines at retail, at wholesale, or to contractors: hardware, paint, wallpaper, lumber, building materials, supplies and equipment for home construction, or farm and garden supplies and equipment.

### 04.10 00 00 00 HOME FURNISHINGS

Organized subject matter and learning experiences related to various sales and sales-supporting tasks performed by distributive employees and management personnel in retail and wholesale establishments engaged primarily in selling home furnishings such as furniture, household appliances, floor coverings, draperies, and specialized lines of home items. (See also 09.02 04 00 00 *Home Furnishings, Equipment, and Services* under HOME ECONOMICS.)

### 04.11 00 00 00 HOTEL AND LODGING

Organized subject matter and learning experiences related to the tasks performed by distributive employees and management personnel in establishments

## 04 DISTRIBUTIVE EDUCATION--(Continued)

business establishments, including selected service trades, which are not classifiable as either retail or wholesale *in nature and function*. (Specify.)

### 04.00 00 01 00 Distribution I

Organized learning experiences which are concerned with the competencies needed by those in basic entry jobs in distribution. The subject matter usually includes a survey of the marketing functions operating in a business enterprise, basic information and skills related to a product line or type of distributive service, and stresses the application of tool subjects, personal employability, and economic understandings. (*Distribution I (Cooperative)* or *Distribution I (Project)* may be scheduled as an extension of *Distribution I*.)

### 04.00 00 02 00 Distribution I (Cooperative)

The extension of classroom instruction into regularly scheduled paid employment in distributive occupations appropriate to each pupil's vocational objective. Usually, the school refers pupils to training stations for an average of 15 hours per week throughout the year, arranges for on-the-job training and supervision, and grants credit for successful application of classroom instruction in the training situation.

### 04.00 00 03 00 Distribution I (Project)

The extension of classroom instruction into regularly scheduled laboratory training in which each pupil practices in and with conditions of employment appropriate to his vocational objective. Usually, the instructor assigns individualized projects through which desired occupational competencies may be achieved, coordinates participation activities with requirements of representative businesses, arranges for some on-the-job training, and approves credit for successful performance in the school and business laboratory environments.

### 04.00 00 04 00 Distribution II

Organized learning experiences which precede *Distribution III* and which are concerned with the competencies needed by those in career development jobs in distribution. The subject matter usually stresses the marketing functions operating in a business enterprise, knowledge and techniques related to product lines, and includes human relations, judgment skills, problems in the tool subjects, and the role of distribution in the economy. (*Distribution II (Cooperative)* or

*Distribution II (Project)* frequently is scheduled as an extension of *Distribution II*.)

04.00 00 05 00 Distribution II (Cooperative)  
Oriented to *Distribution II*. (For definition see 04.00 00 02 00 *Distribution I (Cooperative)*.)

04.00 00 06 00 Distribution II (Project)  
Oriented to *Distribution II*. (For definition see 04.00 00 03 00 *Distribution I (Project)*.)

### 04.00 00 07 00 Distribution III

Organized learning experiences which typically follow *Distribution II* and provide for more extensive treatment of the activities carried on in *Distribution II*. Usually, the subject matter is approached from the point of view of the employee in relation to management activities and merchandising problems. Continued emphasis is given to the effective use of tool skills and the social and economic responsibilities of those engaged in distribution. (*Distribution III (Cooperative)* or *Distribution III (Project)* frequently is scheduled as an extension of *Distribution III*.)

04.00 00 08 00 Distribution III (Cooperative)  
Oriented to *Distribution III*. (For definition see 04.00 00 02 00 *Distribution I (Cooperative)*.)

04.00 00 09 00 Distribution III (Project)  
Oriented to *Distribution III*. (For definition see 04.00 00 03 00 *Distribution I (Project)*.)

### 04.00 00 10 00 Principles of Marketing

Planned learning experiences which are concerned with the problems met in the process of moving goods from the producer to the consumer. The subject matter usually is approached from the viewpoint of employees and managers whose jobs require understandings and skills in the distribution of products and services. (Included as 03.27 01 00 00 *Principles of Marketing* under BUSINESS.)

### 04.00 00 11 00 Agricultural Marketing

Planned learning experiences which emphasize the principles and methods of marketing farm products. Usually, application is made to system and agencies operating at both country and central markets, product grades, public-regulations, pricing, and market analysis.

### 04.00 00 12 00 Industrial Marketing

The study and analysis of the marketing

structure for industrial products. Emphasis frequently is on product policies and lines, distribution channels, sales programs, and warehousing problems. (Included as 03.27 02 00 00 *Industrial Marketing* under BUSINESS.)

04.00 00 13 00 International Marketing

The study of the principles and practices of international trade. Learning experiences usually emphasize import-export procedures, distribution and financing practices in foreign markets, and need and opportunities in international trade. (Included as 03.27 03 00 00 *International Marketing* under BUSINESS.)

04.00 00 14 00 Marketing Trends

The study and analysis of trade and business literature and research findings about marketing procedures and management. Application usually is made to all types of marketing situations by means of case analysis, special studies, the preparation of reports, field observations, and product investigations.

04.00 00 15 00 Retailing

Organized learning activities which emphasize the opportunities in and the development and present status of the retailing structure. Usually an analysis is made of the major store functions, procedures followed in retailing, and opportunities and requirements for career development. (Included as 03.32 00 00 00 *Retailing* under BUSINESS.)

04.00 00 16 00 Retail Trends

A study of the changing retail environment and technological developments affecting retailing. In practice, pupils usually analyze current problems, review trade literature, examine research findings, and interpret business practices as related to management decisionmaking.

04.00 00 17 00 Wholesaling

The study of the problems, organization, and practices of wholesale establishments. Subject matter often includes wholesale merchandising and emphasizes the nature and structure of wholesaling, the distributing function, the warehousing function, sales analyses, stock control, and costs.

04.00 00 18 00 Buying

Organized learning experiences which are concerned with planning, obtaining, and controlling inventories of manufactured goods or raw materials for resale or processing.

04.00 00 19 00 Fashion Merchandising

The study of the major considerations involved in the buying and merchandising of fashion products. The subject matter usually includes principles of selection, the buyer's operation in the market, consumer buying patterns, and planning for profitable results.

04.00 00 20 00 Fashion Trends

The study of the fashion movement and factors which are significant in the analysis of potential trends. In practice, pupils usually (1) survey the sources of fashion ideas, analyze the influence of fashion on apparel, home furnishings, and other products, and (2) study the principles and specialized fashion techniques utilized by fashion directors and coordinators in wholesale and retail organizations.

04.00 00 21 00 Merchandise Mathematics

The study of the principles and mathematical processes applied to daily merchandising problems. The subject matter usually includes problems in computing markups and markdowns, stocksales ratios, invoice terms and dating, merchandise budgeting and interpretation of merchandising figures, and methods of inventory control.

04.00 00 22 00 Retail Buying

The study of the principles and procedures related to the buyer's job. The subject matter usually includes management problems of the store buyer, the organization for buying, resources, model stocks, buying plans, the techniques of buying, brand policies, and foreign buying.

04.00 00 23 00 Retail Merchandising

The study of the merchandising function and its relationship to buying, personal selling, sales promotion, store operations, and management. In practice, emphasis is frequently on sales and profit analysis, planning and expense control, techniques of merchandise adjustment to current conditions, and marketing strategy. (Included as 03.32 03 00 00 *Retail Merchandising (Selling)* under BUSINESS.)

04.00 00 24 00 Other Buying

Include here other organized subject matter and activities emphasized in buying which are not listed above. (Specify.)

04.00 00 28 00 Credit and Collections

The study of credit and its economic sig-

## 04 DISTRIBUTIVE EDUCATION--(Continued)

nificance and relation to sales and profit objectives. Subject matter often includes retail and mercantile credit factors affecting credit policies, the investigation and extension of credit, types of credit instruments, records and credit analysis, collection systems and procedures, and legal remedies. (Included as 03.16.00 00 00 *Credit and Collections* under BUSINESS.)

### 04.00 00 29 00 Marketing Management (General)

Planned learning experiences which are designed for the systematic study of the management function and management decisions in relation to marketing policies, organization, personnel, and financing. (Included as 03.26 04 00 00 *Merchandising Management* under BUSINESS.)

### 04.00 00 30 00 Midmanagement (General)

The study and analysis of the management responsibilities of junior executives and supervisory personnel. Learning experiences frequently include directed occupational training and emphasize employee-management relations, administration of company policies, interpretation of records, profit controls, and product movement.

### 04.00 00 31 00 Personnel Management

A study of methods and policies applicable to personnel work in distributive businesses. Emphasis is frequently on employment practices, job evaluation, ratings, labor relations, and employee development. (Included as 03.26 06 00 00 *Personnel Management* under BUSINESS.)

### 04.00 00 32 00 Retail Store Management

A study of the principal functions, departmental activities, and policies of retail stores. Frequently emphasis is on store organization and operations, including sales-supporting activities, expenses, location and layout, purchasing, and maintenance. (Included as 03.32 05 00 00 *Retail Store Management* under BUSINESS.)

### 04.00 00 33 00 Small Business Management

A study of management functions, policies, and the practical experiences of managers of small business concerns. Emphasis frequently is on the nature of the managerial job, characteristics and special problems of the small businessman, and establishing and operating a small business successfully. (Included

as 03.26 07 00 00 *Small Business Management* under BUSINESS.)

### 04.00 00 34 00 Other Marketing Management

Include here other organized subject matter and activities emphasized in marketing management which are not listed above. (Specify.)

### 04.00 00 38 00 Marketing Research

Planned learning experiences which are designed for the systematic study of the institutions and channels for the marketing of goods and services, including the market environment and interpretation of data from consumer, business, and government sources. (Included as 03.27 00 00 00 *Marketing* under BUSINESS.)

### 04.00 00 39 00 Marketing Analysis

Planned learning experiences which are concerned with the channels of distribution and decision-making regarding marketing expenditures. Subject matter generally includes the comparative advantages of different marketing channels, using an analytical approach to discovering opportunities for business to increase volume, reduce costs, and increase profits.

### 04.00 00 40 00 Other Marketing Research

Include here other organized subject matter and activities emphasized in marketing research which are not listed above. (Specify.)

### 04.00 00 44 00 Advertising and Sales Promotion

The study and development of skills concerned with the principles and theory of advertising as a mass marketing and communications tool, and the coordination of external and internal activities of a promotional nature. (Included as 03.02 00 00 00 *Advertising and Sales Promotion* under BUSINESS.)

### 04.00 00 45 00 Advertising Principles

The study of the economic, sociological, and psychological aspects of advertising. Usually, this is a survey of paid forms of nonpersonal presentations of facts about goods, services, or ideas directed toward groups of people. Emphasis is on understanding media, the role of advertising in the marketing structure, and the different institutions involved in the creation of advertising. Included as 03.02 01 00 00 *Advertising Principles* under BUSINESS.)

### 04.00 00 46 00 Advertising Campaigns

Planned learning experience which em-

phasize the coordination of sales policies, advertising appropriations, media selection, and marketing outlets for the purpose of developing demand for a product or a service. In practice, pupils often analyze and evaluate campaign procedures and plan one or more campaigns in relation to different promotional objectives. (Comprises portions of definition of 03.02 03 00 00 *Advertising Media and Campaigns* under BUSINESS.)

#### 04.00 00 47 00 Advertising Copywriting

Planned learning experiences which emphasize the techniques used in creating effective advertising copy for various types of media. Application is frequently made to cases in national, retail, trade, mail order, industrial, and professional advertising. (Included as 03.02 02 00 00 *Advertising Copywriting* under BUSINESS.)

#### 04.00 00 48 00 Advertising Layout

Planned learning experiences which emphasize the principles, elements, techniques, and rules involved in creating an effective advertising layout. In practice, pupils usually plan and prepare layouts for various types of media.

#### 04.00 00 49 00 Advertising Media-

The study of all types of advertising media and the bases for their selection. The characteristics, advantages, and limitations of various media are analyzed, such as periodical media, mass media, television and radio, and direct-mail media. (Comprises portion of definition of 03.02 03 00 00 *Advertising Media and Campaigns* under BUSINESS.)

#### 04.00 00 50 00 Advertising Production

The study of the production methods used to get a layout into print. Usually included for study are type and printing, engraving and plates, and specific applications to advertising materials.

#### 04.00 00 51 00 Commercial Design

(For definition see 02.02 02 00 00 *Commercial Design* under ART.)

#### 04.00 00 52 00 Direct-Mail Advertising

Organized learning activities which emphasize those forms of direct advertising that are sent through the mails. Usually included for study are the types and uses of direct mail, the development of mailing lists, requirements for successful direct-mail advertising, and practice in creating appropriate direct-mail material for a variety of prospective buyers.

(Included as 03.02 04 00 00 *Direct-Mail Advertising* under BUSINESS.)

#### 04.00 00 53 00 Retail Advertising

A study of advertising as applied to the retail field. Emphasis frequently is given to newspaper advertising, the use of advertising at the point of sale, local resources, and direct media.

#### 04.00 00 54 00 Retail Display

A study of the principles and methods of artistic merchandise display. Learning experiences usually involve the techniques of installing window and interior displays, display tools, equipment and mannequins, and practice in constructing different types of displays. (Included as 03.32 02 00 00 *Retail Display* under BUSINESS.)

#### 04.00 00 55 00 Retail Sales Promotion

A study of modern sales promotion practices used by different types of retail stores. Emphasis frequently is on the coordination of advertising, display, special events and personal selling, the development and implementation of sales promotion plans; and special techniques in relation to hard and soft lines of goods.

#### 04.00 00 56 00 Showcard Techniques.

The study and practice of showcard writing. Learning experiences usually include lettering, spacing, banner-making, showcard copy, and construction.

#### 04.00 00 57 00 Other Sales Promotion

Include here other organized subject matter and activities emphasized in advertising and sales promotion which are not listed above. (Specify.)

#### 04.00 00 61 00 Purchasing

The study of the practices and problems which confront the purchasing agent. Subject matter often includes the sources of supply, market information, material specification, control inventories, and the purchase budget.

#### 04.00 00 62 00 Salesmanship

Planned learning experiences which emphasize the psychological and economic impact of selling and the fundamentals of sales ability. Emphasis frequently is on practices in wholesale, retail, and specialty salesmanship, buying motives, creating product acceptance, building goodwill, and the application of new techniques to tangible and intangible sales.



## 04 DISTRIBUTIVE EDUCATION--(Continued)

(Included as 03.33 00 00 00 *Salesmanship Principles* under BUSINESS.)

### 04.00 00 63 00 Direct Sales

The study and analysis of opportunities, activities in, and requirements for outside selling. In practice, emphasis frequently is on planning and delivering sales presentations, management of time, prospecting, company and product competition, practical demonstrations, and field experiences.

### 04.00 00 64 00 Retail Selling

A study of the fundamentals of successful retail store selling. Learning experiences frequently include the analysis of consumer psychology, steps in the sales process, and the development of selling skills and techniques by means of sales demonstrations, role playing, and occupational experience. (Included as 03.32 04 00 00 *Retail Salesmanship (Selling)* under BUSINESS.)

### 04.00 00 65 00 Sales Management

The study of the operation of a sales organization involved in the outside selling of goods and/or services. The subject matter usually includes sales forecasting, hiring, evaluating, and supervising the sales force; managing territories and routes; and correlating the sales activities with those of production and other departments of the business enterprise.

### 04.00 00 66 00 Other Selling

Include here other organized subject matter and activities emphasized in selling which are not listed above. (Specify.)

### 04 00 00 70 00 Transportation

The study of practices and relationships in the physical distribution of merchandise. Subject matter often includes principles of traffic management; characteristics of air, motor, rail, and water transportation; pickup and delivery; consolidation; and finance.

### 04.00 00 71 00 Principles of Insurance

The study of the foundations of the standard forms of insurance and the functions of those following an insurance career. Subject matter usually emphasizes the practices and major coverages involved in life, fire, casualty, automobile, and property insurance. The nature of risk; the social and economic service of insurance; and insurance as a vocation.

(Included as 03.24 01 00 00 *Principles of Insurance* under BUSINESS.)

### 04.00 00 72 00 Life Insurance

The study of the fundamentals of life insurance. Subject matter usually emphasizes the role of the salesman in analyzing the nature of personal risks or life contingency risks of businesses, types and functions of contracts, premium costs, proceeds, and insurance company operation. (Included as 03.24 02 00 00 *Life Insurance* under BUSINESS.)

### 04.00 00 73 00 Casualty Insurance

The study of the fundamentals of casualty insurance. Subject matter usually emphasizes selling skills in the fields of automobile, liability and theft insurance; the nature of contracts, benefits, and premiums; and controls and bonding. (Comprises portion of definition of 03.24 03 00 00 *Property and Casualty Insurance* under BUSINESS.)

### 04.04 00 74 00 Property Insurance

The study of fundamentals of property insurance. Subject matter usually includes the principles and practices involved in fire insurance and extended coverage, and marine insurance. Instruction emphasizes sales and management opportunities and problems and procedures in agency or home office work. (Comprises portion of definition of 03.24 03 00 00 *Property and Casualty Insurance* under BUSINESS.)

### 04.04 00 75 00 Real Estate Principles

The study of the economic factors affecting real estate, regulations, practices, and professional ethics of the real estate business. Usually, this includes a survey of problems involved in the acquisition, ownership, use, and disposition of real estate interests. (Included as 03.31 01 00 00 *Principles of Real Estate* under BUSINESS.)

### 04.00 00 76 00 Real Estate Practices

Planned learning experiences which emphasize the techniques of operating a real estate business and the actual procedures involved in the daily activities of brokers and salesmen. In practice, pupils usually develop skills needed in selling, prospecting, listing, making financial arrangements, effective advertising, and ethical relationships.

### 04.00 00 77 00 Real Estate Management

The study of the fundamentals of property

management. The subject matter usually includes the economics of real estate, managing income properties, methods of promotion, professional standards, and the functions and qualifications of the property manager. (Included as 03.31 05 00 00 *Real Estate Management* under BUSINESS.)

#### 04.00 00 78 00 Real Estate Law

The study of the legal aspects of property and property rights. The subject matter usually includes legal practices as they apply to real estate ownership, operations, instruments, and various phases of the real estate business. (Included as 03.31 04 00 00 *Real Estate Law* under BUSINESS.)

#### 04.00 00 79 00 Real Estate Appraisal

Planned learning experiences which emphasize the factors affecting the value of farm, residential, commercial, and industrial real estate. In practice, pupils usually develop appraisal proficiency by means of field work on property and making application of appraisal techniques, including the preparation of the appraisal report. (Included as 03.31 02 00 00 *Real Estate Appraisal* under BUSINESS.)

#### 04.00 00 80 00 Real Estate Finance

The study of the sources and availability of funds, and the procedures for financing real estate. The subject matter usually includes financial analyses of real properties, types of lenders, management servicing, and repayment of loans, government aids, regulations, and trends. (Included as 03.31 03 00 00 *Real Estate Finance* under BUSINESS.)

#### 04.00 00 81 00 Real Estate Sales

The study of the fundamentals of real estate transactions. The subject matter usually includes analyzing residential and income properties, listing and showing property, prospecting and qualifying prospects, trades, modernization, regulations, and practices governing the sale or purchase of real property. (Included as 03.31 06 00 00 *Real Estate Sales* under BUSINESS.)

#### 04.00 00 82 00 Product Information

The study of the characteristics of specific products or services transferred during the marketing process. The subject matter usually includes the techniques of handling specific products performing personal or business services, the identification of values to customers, regulations and controls, and sources of product information used by consumers and the trade.

(Included as 03.32 01 00 00 *Merchandise Information (Product Information)* under BUSINESS.)

#### 04.00 00 83 00 Nontextiles

The study of consumer products other than fabrics or soft-line merchandise. The subject matter usually includes materials used, their construction and care, and government regulations. Emphasis is on the values to consumers of different types and qualities of merchandise.

#### 04.00 00 83 00 Textiles

The study of fabrics and soft-line merchandise which are generally classified as apparel, domestics, or home furnishings. The subject matter usually includes the properties of natural and man-made fibers, fabric construction and finishes, appropriate utilization, values to the consumer, and marketing techniques.

#### 04.00 00 85 00 Accounting

(For definition see 03.01 00 00 00 *Accounting* under BUSINESS.)

#### 04.00 00 86 00 Business-Government Relationships

The study of the economic aspects of public policy affecting the market processes. The subject matter usually includes an analysis of Federal, State, and local regulations, restraints of trade, monopoly, purposes and effect of laws relating to competition, the grant corporation, and international and domestic cartels.

#### 04.00 00 87 00 Business Law

(For definition see 03.09 00 00 00 *Business Law* under BUSINESS.)

#### 04.00 00 88 00 Communications for Distribution

Organized learning experiences which are concerned with the application and refinement of skills in reading, speaking, listening, and writing in distributive employment. (See also 03.06 00 00 00 *Business Communications* under BUSINESS.)

#### 04.00 00 89 00 Economics of Consumption

The study of the place of the consumer and his problems in the economic system. The subject matter usually is concerned with the relationship of personal income to price levels, the role of the consumer in determining the amount of the national income and the stability of the economic system, and the effect of consumer liquid assets and availability of

## 04 DISTRIBUTIVE EDUCATION--(Continued)

consumer credit on total consumer demand. (See also 15.06 03 00 00 *Consumer Economics* under SOCIAL SCIENCES/SOCIAL STUDIES.)

### 04.00 00 90 00 Economics of Marketing

A study of the contributions of economic theory to the managerial problem of price determination and price policy. The subject matter usually includes demand and cost curves, survival and growth, values added by distribution, and problems of introducing the results of technological progress into the market.

### 04.00 00 91 00 Effective Store Speech

Planned learning activities which emphasize the development of facility in oral communications. The subject matter usually stresses the organization of ideas, product and marketing vocabulary, clarity of expression, telephone usage, and practice in the techniques used in different communications situations.

### 04.00 00 92 00 Employee Supervision

The study of supervisory relationships and practices in distribution and marketing. The subject matter usually includes techniques of employee induction, morale building, followup and evaluation, correction, grievances, and an analysis of leadership and motivation.

### 04.00 00 93 00 Employee Training

The study of the principles, organization, and techniques of individual and group training in distributive occupations. The subject matter usually includes the development of initial and followup programs, department and sales meetings, practice training in skills, and acquisition of information.

### 04.00 00 94 00 Evaluation Techniques

The study of job evaluation and procedures for implementing an evaluation program. The subject matter usually includes systems of and steps in organized evaluation, job ranking, rating devices, performance reviews, and the effect of evaluation on personnel supervision and administration.

### 04.00 00 95 00 Expense Control

The study of practices and trends in expense control. The subject matter usually includes an analysis of expense items, the relationship of expense control to net profit, planning and adjustment to current

conditions, and available tools for stock and dollar management.

### 04.00 00 96 00 Human Relations

Organized learning experiences which are concerned with personal effectiveness in relation to customers, to the distributive business, to employees, and to job activities. (See also 03.11 00 00 00 *Business Psychology* under BUSINESS.)

### 04.00 00 97 00 Report Writing

(For definition see 03.06 02 00 00 *Report Writing* under BUSINESS.)

### 04.00 00 99 00 Other Subject Matter in Distributive Education

Include here other organized subject matter and activities emphasized in distributive education not listed above or classifiable in one of the above major categories. (Specify.)

## ENGLISH LANGUAGE ARTS

### 05.00 00 00 00

English language arts is comprised of the body of related subject matter, or the body of related courses, organized for carrying on learning experiences concerned with developing (1) an understanding of the language system; (2) proficiency and control in the use of the English language; (3) appreciation of a variety of literary forms; (4) understanding and appreciation of various aspects of past and present cultures as expressed in literature; and (5) interests which will motivate lifelong learning.

The Ad Hoc Committee for English Language Arts applied the following rationale to the selection of substantive content for placement in the English Language Arts subject-matter area: (1) the content was determined by consensus of the committee to be appropriate to English language arts; (2) subject-matter items could be defined in brief form using only salient descriptive elements; and (3) the various aspects of organized subject matter classified under English Language Arts were identifiable by titles which were considered to be most commonly used in current practice.

Opportunities are frequently provided both during and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of English language arts as an integral part of the instructional program. As an example, the Journalism

Club provides additional opportunities to develop leadership, other qualities, and an understanding of the role of journalism in society. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. They may be designed for participation of pupils as individuals or in groups. A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146, and they are described more fully in this chapter beginning on page 242. As an illustration, the Journalism Club is identified for reporting purposes under Cocurricular Activities as Item 20.01 17 00 00.

Included under this heading are the items of information which identify various aspects of subject matter in the English language arts subject-matter area.

#### 05.01 00 00 00 LANGUAGE SKILLS

Subject matter and experiences concerned with knowledge, understanding, and skills designed to develop competency in the use of language. Emphasis is on (1) oral language involving "intake" (listening), and "output" (speaking), and (2) written language involving "intake" (reading), and "output" (writing). Activities include the development of vocabulary, concepts, interpretations, reactions and responses, and concentration on skills in writing, reading, speaking, listening.

#### 05.01 01 00 00 Reading

Instruction designed to develop the skills necessary to perceive and react to patterns of written symbols and translate them into meaning. The teaching of reading is differentiated according to a number of levels and objectives. The continuous development of reading skills and vocabulary applies to all subject-matter areas, emphasizing selected skills and vocabulary appropriate to pupils' needs in different learning situations.

#### 05.01 01 01 00 Reading Readiness

A variety of planned activities designed to develop in children the mental, physical, and emotional maturity prerequisite to instruction in reading. In practice emphasis is placed on a variety of learning situations, e.g., direct and vicarious experiences involving oral language, such as listening, speech habits and patterns, developing sequential organization of ideas, vocabulary development, and experience with books and stories.

#### 05.01 01 01 02 Beginning Reading

The initial activities involved in teaching pupils to read, following necessary readiness activities. These reading activities are designed to develop understanding of the relationship between oral and written language, recognition of symbols (letters) and symbol-sound relationships, and appreciation of the reading process.

#### 05.01 01 03 00 Developmental Reading Program

A program of learning experiences designed to help pupils develop sequentially all aspects of reading proficiency needed by a mature reader. This program may be centered in a series of basal readers and their accompanying learning aids, in an individualized plan which utilizes an extensive library or utilizes reading in all of the materials of the content subjects. Each of these plans includes attention to oral and silent vocabulary development, comprehension, critical reading, speed and the adjustment of reading techniques to varying needs.

#### 05.01 01 04 00 Basal Reader Program

Systematic learning experiences which are developed through a series of basic reading books and materials designed in sequential steps for successive levels of instruction.

#### 05.01 01 05 00 Remedial Reading

Planned diagnostic and remedial activities, for individual pupils or groups of pupils, designed to correct and prevent further reading difficulties which interfere with the pupil's expected progress in developing reading skills, understandings, and appreciations.

#### 05.01 01 06 00 Individualized Reading

A reading program which utilizes an extensive library and permits self-selection of materials and pacing suited to each pupil. The development of skills is guided through individual conferences and individual or small-group teaching. An individualized reading program or a portion of this program may be part of another type of reading program.

#### 05.01 01 07 00 Oral Reading

The reading aloud of printed materials. In practice, oral reading is used for a variety of purposes, e.g., to develop listening skills, to develop skills in pronunciation, to develop ability in translating and interpreting ideas from written words through oral expression, and to aid pupils in understanding patterns in linguistic structures.

## 05 ENGLISH LANGUAGE ARTS-(Continued)

### 05.01 01 08 00 Initial Teaching Alphabet (ITA)

A decoding system using a 44-character alphabet (each character representing a distinct sound) instead of the standard 26-letter alphabet (in which the vowels and consonants represent varying sounds).

### 05.01 01 99 00 Other Reading

Include here other organized subject matter and experiences emphasized in reading which are not listed above, e.g., notetaking and outlining skills. (Specify.)

### 05.01 02 00 00 Handwriting (Penmanship)

Instruction designed to assist pupils in learning the processes and developing the skills involved in using an inscribing instrument to record manually material to be read.

### 05.01 02 01 00 Manuscript Writing

Instruction designed to assist pupils in learning the processes and developing the skills involved in a style of handwriting which makes use of variations of printed letter forms.

### 05.01 02 02 00 Cursive Writing

Instruction designed to assist pupils in learning the processes and developing the skills used in inscribing a style of handwriting utilizing flowing lines and connecting letters with strokes which have rounded angles.

### 05.01 02 99 00 Other Handwriting

Include here other organized subject matter and experiences emphasized in handwriting which are not listed above. (Specify.)

### 05.01 03 00 00 Spelling

Organized subject matter, experiences, and learning activities concerned with developing the mind-eye-hand coordinations and memory involved in ordering letters into whole words according to standard written usage.

### 05.01 04 00 00 Punctuation

Experiences designed to develop an understanding of the established system of points or marks used in written English to indicate the syntactic units and their interrelationships. The relationship of the marks to syntactic factors (such as sentence, clause, and phrase), to rhetorical factors (such as emphasis,

parallelism, and subordination), and to voice factors (intonation patterns) may all be shown.

### 05.01 05 00 00 Listening

Activities which are planned to sharpen children's listening skills and to foster apperceptive, attentive, and analytical listening with increasing skill. (See also 05.05 01 04 00 *Listening* under *Speech*.)

### 05.01 06 00 00 Dictionary Skills

Experiences designed to develop an understanding of the process by which dictionaries are constructed and the type of information available from this source, together with the skills needed to locate and use this information.

### 05.01 07 00 00 Reference Skills

Experiences designed to develop an understanding of the many types of reference materials and the type of information particular to each, together with the development of the skills needed to use these references effectively and efficiently.

### 05.01 08 00 00 Voice and Diction

(For definition see 05.05 03 01 00 *Voice and Diction* under *Speech*.)

### 05.01 99 00 00 Other Language Skills

Include here other organized subject matter and experiences emphasized in language skills which are not listed above. (Specify.)

## 05.02 00 00 00 LINGUISTICS

The descriptive, historical, and theoretical study of language as such, its nature, structure, varieties, and history, including especially the sound system (phonology), grammatical system (morphology, syntax), lexical system (vocabulary, semology), and writing system.

### 05.02 01 00 00 Phonology

The descriptive, historical, and theoretical study of the sound system of language or languages.

### 05.02 01 01 00 Phonetics

The division of phonology dealing with the study and classification of the sounds of speech as spoken and heard.

### 05.02 01 02 00 Phonemics

The division of phonology dealing with the study of distinctive units and structural patterns

within the sound system of a specific language or dialect.

#### 05.02 02 00 00 Grammar

The division of linguistics including primarily morphology and syntax, hence the study by various methods of the structural devices by which the meaning-bearing units of a language (morphemes, words, phrases, sentences) are identified and their relationships indicated.

#### 05.02 02 01 00 Traditional Grammar

The study of the type of English grammar commonly taught in schools from the nineteenth century on, generally using semantic criteria for identifying "parts of speech" and other categories derived from Latin grammar, emphasizing sentence analysis, and often normative in character and prescriptive in application

#### 05.02 02 02 00 Structural Grammar (Descriptive)

Study concerned with the type of grammar which objectively describes and analyzes the structure of a language in terms of (1) formally identifiable units in a hierarchy of increasingly complex combinations and (2) the immediate and ultimate constituents of sentences. (The term "Descriptive Grammar," sometimes used as an equivalent of "Structural Grammar," properly includes any kind of grammar derived inductively from objective observation of a body of utterances in a language.)

#### 05.02 02 03 00 Generative Grammar

The type of grammar which uses a set of rules, in a required order, capable of generating (or accounting for) all possible grammatically acceptable sentences of a language. The rules are commonly expressed as formulas composed of symbols standing for linguistic units and operations.

#### 05.02 02 04 00 Transformational Grammar

A type of grammar (usually generative, q.v.) which explains certain constructions as being derived from others by processes of structural change without change of meaning (i.e., by transformations).

#### 05.02 03 00 00 Usage (Functional Grammar)

The study and teaching of the ways in which certain selected features of a language, especially those not "system-centered" or covered by general rules, are employed (the descriptive approach) or should be employed (the prescriptive approach). The features

may be grammatical, lexical, or other, and they may be seen in relation to (1) the social or esthetic milieu (e.g., illiterate, common, and cultivated) and (2) the use they are put to (e.g., conversation, or formal address). In school practice, where a standard form of the language is to be inculcated, the prescriptive approach necessarily obtains, this is acceptable, however, if prescriptions are soundly based on accurate descriptions.

#### 05.02 04 00 00 History of the English Language

The study of the ways in which the Anglo-Saxon dialects transplanted to Britain in the fifth century A.D. developed in the course of time into the language called "English," today. Any or all aspects of the broad subject are included, but attention centers especially on the "outer history" (the influence of nonlinguistic factors such as social and political change) and the "inner history" (the processes of general language change as they affected this specific language).

#### 05.02 05 00 00 Dialectology

The study of the features of a language, written or spoken (sounds, forms, constructions, words), as they vary individually or in related groups with respect to their distribution, geographical or social. Theoretically, it can be synchronic (of a single point in time), practically, it is diachronic (historical), since the variations can be understood only as the result of developments occurring over a span of years. "Dialects" are often thought of as those varieties within a language which have more features in common with each other than they have separately.

#### 05.02 06 00 00 Semantics (Semology)

The historical and descriptive study of meaning as a linguistic phenomenon, including the structure of the meaning system of a language or set of languages, the components of meaning and their combination in larger structures of meaning; the association of meanings with morphemes and words, and the systematic study of meaning change. This approach is to be distinguished from GENERAL SEMANTICS (see 05.04 01 03 00 *General Semantics*), which is defined by Webster III as "a doctrine and educational discipline due to Alfred Korzybski (1879-1950) intended to improve habits of response of human beings to their environment and one another especially by training in the better and more critical uses of words and other symbols." Specifically, the study of SEMANTICS deals with meaning as a system within the overall structure of language, GENERAL SEMANTICS deals with meaning

## 05 ENGLISH LANGUAGE ARTS-(Continued)

as a relationship between linguistic signs and the outside world.

### 05.02 07 00 00 Study About Languages

A cover term used to include any instruction about language or languages (as distinct from instruction in a language or training in the skills of using language) which may be included in the curriculum from the elementary grades on, but which is not formal and developed sufficiently to be denominated LINGUISTICS (q.v.).

### 05.02 99 00 00 Other Linguistics

Include here other organized subject matter and experiences emphasized in linguistics which are not listed above. (Specify.)

## 05.03 00 00 00 LITERATURE

The study of printed materials which have noteworthy content and excellence of style, and which may be identified by country, type, and/or period of time. Such study may be directed to bodies of national literature such as American and British, or may be more inclusive as in World Literature, which term usually includes Oriental literary works. The types usually considered in the study of literature are biography, drama, essay, fiction, and poetry. Myths and legends are sometimes considered as types. Often the focus is on specialized areas as in "Biblical literature" and "classical literature." Occasionally, literary works are selected for a special group as in "children's literature" and "literature for adolescents." For developing taste and critical judgment, writing and discussion are frequently a means of instruction in the study of literature.

### *By Source*

### 05.03 01 00 00 American Literature

The study of selected American literary works of various types. Such subject matter is usually related to the development of distinctive qualities of the national literature through use by writers of indigenous materials. The study may be conducted within an historical framework or within an organization by themes or by literary types. (See also 05.03 00 00 00 Literature.)

### 05.03 02 00 00 Biblical Literature

The study of selected portions of the Old and

New Testaments with attention to literary qualities and to ideas which have importance in the spiritual and intellectual life of western man. Frequently, attention is given to stories, events, and persons used or alluded to by western writers, artists, and musicians.

### 05.03 03 00 00 Classical Literature

The study of selected literary works of ancient Greece and Rome. Special attention is frequently given to materials which have been used or alluded to by more recent writers. (See also 05.03 00 00 00 Literature.)

### 05.03 04 00 00 English Literature

The study of selected English literary works of various types. These works can be approached within successive historical periods of English history with attention to differences in the cultural settings and varying styles of literary expression. (See also 05.03 00 00 00 Literature.)

### 05.03 05 00 00 World Literature

The study of selected literary works of Western and Eastern cultural origin from ancient times to the present. Such study frequently includes religious and philosophic works which have literary excellence. (See also 05.03 00 00 00 Literature.)

### 05.03 35 00 00 Other Literature by Source

Include here other organized subject matter and experiences emphasized in literature—by source—which are not listed above. (Specify.)

### *By Genre:*

### 05.03 36 00 00 Biography

The study of the lives of persons in narrative accounts which have stylistic and other formal qualities that make them noteworthy as literary works. Techniques of presentation have been developed through ages, and many of these have aimed to reveal the character of the subject as well as the facts of his life. Biographies often serve to satisfy young peoples' search for ideals and values.

### 05.03 37 00 00 Drama

The study of a type of literature distinguished by plot, setting, theme, and characters engaged in movement and dialogue. It is distinguished from narrative by being a direct presentation of action. The main types and styles of dramatic literature usually studied are tragedy, comedy, melodrama, farce, social

drama of ideas, classical, romantic, realistic, impressionistic, and expressionistic. The structure of a drama, its plot, and the techniques by which character is revealed are primary items for consideration in the study of a drama. Dramas are often expressions of a philosophy or social point of view of the dramatist, and often serve as excellent revelations of the temper of a historical period or of a culture. Appreciation of the literary qualities of a drama may be enhanced by its being read as an artistic creation intended for performance on a stage.

#### 05.03 38 00 00 Essay

The study of expository writings of a formal and informal kind. The formal may include short or extended articles which present ideas or information, the writer's purpose frequently being to set forth a central idea or thesis. Informal essays, or familiar essays as they are sometimes called, may be read for a revelation of the writer's personality and subjective reactions to an experience or to an event which he has observed.

#### 05.03 39 00 00 Fiction

The study of short stories and novels with special attention to point of view, plot, character, setting, and theme. Frequently, teachers select fictional works in accordance with their suitability for pupils' developmental levels and their needs and interests.

#### 05.03 40 00 00 Poetry

The study of literary selections which are characterized by rhythm, imagery, words chosen for their connotative values, and varied figures of speech, especially similes and metaphors, they may or may not have rhyme. Poems may be studied by types, or they may be arranged by theme and studied in relation to theme. They sometimes are studied within an historical framework of literary periods, when studied in such contexts they may be considered as expressions of the spirit of the time in which they were written. However, they have most frequently been regarded as revelations of writers' emotions and ideas.

#### 05.03 65 00 00 Other Literature by Genre

Include here other organized subject matter and experiences emphasized in literature by genre - which are not listed above. (Specify.)

#### 05.03 66 00 00 Children's Literature

The study of the portion of the larger body of literature which has both appeal and interest to

children and is understood by them. Literature for children can be found in the various genres and can be obtained from both English and other sources. It extends from picture books designed specifically for young children to adult reading material.

#### 05.03 67 00 00 Literature for Adolescents

The study of that portion of the larger body of literature which has both appeal and interest and can be understood by young people of the age range commonly called "adolescent." Literature for adolescents can be found in the various genres and can be obtained from both English and other sources.

#### 05.03 68 00 00 Myth and Legend

The study of stories, ballads, and plays which have come from the oral tradition of national groups and which constitutes a part of their literature. Such folk material is sometimes organized as a unified body, but is more frequently combined with other literary works into thematic or type arrangements. Appreciation of esthetic qualities of such selections is often enhanced by their being sung, recited, or performed.

#### 05.03 69 00 00 Humanities

The study of a group of related subjects such as literature, art, music, religion, history, philosophy, and classical and modern languages - with literary works usually forming the core concerned with man's individual cultural achievements and values in society as distinguished from social institutions and customs of the natural world. Sometimes aspects of the various subject-matter areas are taught separately but relatedly; in other instances these aspects of subject matter areas are fused or integrated. (See also 02.01 63 00 00 *Humanities* under ART, 06.03 00 00 00 *Humanities* under FOREIGN LANGUAGES, 12.07 00 00 00 *Humanities* under MUSIC, and 15.09 00 00 00 *Humanities* under SOCIAL SCIENCES/SOCIAL STUDIES.)

#### 05.03 99 00 00 Other Literature

Include here other organized subject matter and experiences emphasized in literature which are not classified or listed above. (Specify.)

#### 05.04 00 00 00 COMPOSITION

Learning activities concerned with the art of selecting, combining, and arranging words in connected discourse.

#### 05.04 01 00 00 Theory



## 05 ENGLISH LANGUAGE ARTS-(Continued)

The study of the form of composition emphasizing dependence on principles and rules which have evolved through time, as well as dependence on personal abilities and the language to be used. On the basis of the language used, the pupil selects from his ideas those which can best be arranged in a form to which an individual may respond. Mental ordering of the ideas precedes writing them. Ideas are explored, experimented with, and revised through writing.

### 05.04 01 01 00 Logic

The study of the formal principles frequently included in composition courses with the objective of improving the reasoning of the writer. Principles of inductive and deductive thinking and possible errors in such thinking form the basis of this instruction. Some of the topics usually included in the study of inductive reasoning are: the testing of the adequacy of evidence; the validity of generalizations, the cause and effect relationship—oversimplification and the attribution of false cause; the invalidating factor of difference in reasoning by analogy. The validity of the premises and their relationship to each other and to the conclusion in a syllogism are the essential topics in the study of deductive reasoning. The work in logic in a composition course also usually includes attention to the pitfalls of circular reasoning, begging the question, avoiding the issue, and arriving at a false or irrelevant conclusion. Emphasis is given in such instruction, not to the detection of errors in thinking found in other people's speech and writing, but to the avoidance of them in one's own.

### 05.04 01 02 00 Rhetoric

The study of the art of discourse and its various meanings, one of which is the same as that of "composition." Composition courses are sometimes referred to as rhetoric courses. Originally, in classic times, the term was applied to oratory, but in modern times it is also applied to written communication. Considered as the theory of composition, the term applies to the principles and rules of composition formulated by ancient orators and modified through the ages by theorists of the composing art. Generally, the subject matter and experiences involved in the study of these principles and rules are designed to aid in the arrangement of a speech or written discourse to bring about a desired effect on a listener or reader. Emphasized are: methods of persuasion; the effective and orderly arrangement of the parts of a discourse; style;

and rhetoric as a system of gathering, arranging, and expressing the subject matter of discourse, and as a guide for making decisions in the process of composition. (See also 05.05 01 00 00 *Rhetoric and Public Address* under *Speech*.)

### 05.04 01 03 00 General Semantics

The body of principles sometimes included for study and application in composition courses. The primary purpose of general semantics as a discipline, or as a point of view, in the field of communication is to improve language habits so that verbal symbols correspond more exactly to persons, things, and events on the nonverbal or fact level. It is the study of evaluative processes, the ways in which a person interprets his environment through signs and symbols, including language. Attention is usually given to: factual as distinguished from inferential statements; multivalued in nature as distinguished from two-valued orientation in the language of writers or speakers; verbal abstractions as distinguished from low-order terms; indexing or noting differences to avoid stereotyping; dating to avoid rigidity; emotive language and its effects on human behavior; the distinction between a thing and its label or name, and the contexts of language.

### 05.04 02 00 00 Writing

Learning experiences designed to provide opportunities for pupils to develop knowledge, understanding, and skills essential to self-expression, e.g., ideas, interests, and facts, in written language. Writing forms vary according to the content, the audience, and the purpose of the writer.

#### 05.04 02 01 00 Expository Writing

Learning experiences designed to develop knowledge, understanding, and skills involved in a form of writing concerned with selecting, ordering, and explaining information in a detailed, logical manner.

#### 05.04 02 02 00 Persuasive Writing

Learning experiences designed to develop knowledge, understanding, and skills involved in a form of writing concerned with selecting and organizing ideas for presenting a particular point of view in a persuasive manner—employing inference and logic.

#### 05.04 02 03 00 Creative Writing

Learning experiences designed to develop knowledge, understanding, and skills involved in a form of writing that is free, not prescriptive, and expresses primarily the interest and emotions of the writer,

particularly the personal satisfaction that the writer feels.

#### 05.04 02 04 00 Narrative Writing

Learning experiences designed to develop knowledge, understanding, and skills involved in a form of writing concerned with telling a story in a sequentially organized manner.

#### 05.04 03 00 00 Journalism

The study and practice of writing, editing, and publishing newspapers and periodicals. Instruction usually emphasizes reporting and feature and editorial writing. (See also the category 05.05 04 00 00 *Speech Through Mass Media.*)

#### 05.04 03 01 00 Reporting

The study and practice of gathering facts about current events and writing about such events for publication in newspapers and periodicals.

#### 05.04 03 02 00 Editorial Writing

The study and practice of composing an article of opinion or comment for publication in a newspaper or periodical.

#### 05.04 03 03 00 Feature Writing

The study and practice of composing an article with strong emotional or human interest appeal for publication in a newspaper or periodical.

#### 05.04 03 04 00 History of Journalism

The study of the financial, technical, and editorial processes and the contributions of individuals involved in the publishing of newspapers and periodicals from the beginnings of such publications to the present.

#### 05.04 03 99 00 Other Journalism

Include here other subject matter emphasized in journalism which is not listed above. (Specify.)

#### 05.04 99 00 00 Other Composition

Include here other organized subject matter emphasized in composition which is not listed or classifiable above. (Specify.)

#### 05.05 00 00 00 SPEECH

Subject matter and experiences comprised of a wide spectrum of studies and activities that range from the scientific (voice science) through the humanistic (rhetoric) and the behavioral sciences (group dynamics)

to the artistic (oral interpretation of literature). The unifying feature of these studies and activities is the predominance, in varying degrees, of oral communication.

#### 05.05 01 00 00 Rhetoric and Public Address

The study of the practical arts, of speaking as revealed in the variety of forms and functions evident in public discourse. Emphasized are speech-making (composition and delivery), argumentation and debate, audience analysis and listening behavior, persuasion, discussion, parliamentary procedure, speech criticism, and the history of rhetoric and public address. (See also 05.04 01 02 00 *Rhetoric* under *Composition.*)

#### 05.05 01 01 00 Public Speaking

The study of theory and practice involved in composing and delivering speeches, including informative, persuasive, and inspirational types.

#### 05.05 01 02 00 Argumentation and Debate

Study and practice in the discovery, selection, analysis, organization, and presentation of evidence and argument for and against a proposition, often in formal debate. (See also the category 05.04 02 00 00 *Writing.*)

#### 05.05 01 03 00 Communication Theory

An analysis of the communication process, including the psychology of the listener, information theory, message formulation and dissemination.

#### 05.05 01 04 00 Listening

The exploration and study of the theory of listening with oral-aural practice in the skills of comprehension through listening. (See also 05.01 05 00 00 *Listening* under *Language Skills.*)

#### 05.05 01 05 00 Discussion

The exploration and study of evidence and issues, through analysis and oral exchanges, leading toward the identification of problems and the formulation of possible solutions. Included are study and practice in the use of the various forms of discussion: informal groups, committees, conferences, panels, symposiums, forums, et al.

#### 05.05 01 06 00 Speech Criticism

A study of rhetorical theory, past and present, including a critical examination of recorded speeches and their contexts

## 05 ENGLISH LANGUAGE ARTS--(Continued)

- 05.05 01 07 00 Parliamentary Procedure  
At study of the theory, with opportunities for practice, of the rules and procedures used in conducting formal meetings.
- 05.05 01 08 00 Persuasion  
Subject matter and experiences designed for intensive study and practice in the composition and delivery of speeches that are designed, through the use of appropriate rhetorical techniques and motivational patterns, to change or strengthen beliefs or to secure action.
- 05.05 01 99 00 Other Rhetoric and Public Address  
Include here other organized subject matter and experiences emphasized in rhetoric and public address which are not listed above. (Specify.)
- 05.05 02 00 00 Oral Interpretation of Literature  
The study of principles, and opportunities for practicing the art of analyzing and reading literature aloud to others.
- 05.05 02 01 00 Choral Speech  
The theory and practice of group readings of literary works.
- 05.05 02 02 00 Readers' Theatre  
The analysis and performance of dramatic works embodying the principles of oral interpretation of literature as opposed to those of acting.
- 05.05 03 00 00 Speech Improvement  
Subject matter and experiences concerned primarily with the acquisition, largely through study and exercises, of such basic language skills as adequate projection, articulation, phrasing, vocal variation, and appropriate usage.
- 05.05 03 01 00 Voice and Diction  
The study, and application through exercises, of knowledge about voice production and the means for improving projection, articulation, pronunciation, phrasing, melody patterns, et al., and for developing where needed, often through the use of phonetics, standard usage.
- 05.05 03 99 00 Other Speech Improvement  
Include here other organized subject matter and experiences emphasized in speech improvement which are not listed above. (Specify.)
- 05.05 04 00 00 Speech Through Mass Media  
The study and practice of the techniques and procedures of mass media as well as the identification of artistic features unique to each medium. The study of history and criticism is usually coupled with experiences in the arts of radio, television, and/or films.
- 05.05 04 01 00 Radio and Television  
A study of broadcasting, with exercises, where appropriate, that include its history, its role in contemporary society, its artistic dimensions, its production techniques, principal genres, et al.
- 05.05 04 02 00 Film  
A study of, and in some instances practice in, the cinematographic arts including history, production, and criticism.
- 05.05 99 00 00 Other Speech  
Include here other organized subject matter and experiences emphasized in speech which are not classifiable or listed above. (Specify.)
- 05.06 00 00 00 DRAMATIC ARTS  
Subject matter and experiences concerned with a wide range of studies and activities including playwriting, dramatic literature, scenic design, acting, directing, and the supporting arts and crafts of the theatre and of selected aspects of radio, television, and film.
- 05.06 01 00 00 Acting  
Theory and practice in the art and craft of interpreting roles from dramatic literature for presentation on the stage or through certain mass media.
- 05.06 02 00 00 Dramatic Literature  
The study of the types, forms, and styles of plays from both the past and the present with special emphasis on the elements of production that are used in transposing a manuscript into living theatre.
- 05.06 03 00 00 Creative Dramatics  
Learning activities wherein pupils, using nondramatic literary materials created by themselves or by others, create informal, nonscripted plays using their own words and movements.
- 05.06 04 00 00 Play Production  
The study of, coupled with opportunities for practical experience with, such component elements in

producing plays as directing, staging, costuming, makeup, properties, and business management.

#### 05.06 05 00 00 Playwriting

A study of the theory of dramatic writing (form, structure, style) coupled with an examination of representative plays and appropriate exercises in writing.

#### 05.06 06 00 00 Technical Theatre and Design

An intensive study of the physical aspects of play production including scenic design, costume design, lighting design, and stagecraft with opportunities, frequently in conjunction with cocurricular activities, for practical experiences.

#### 05.06 07 00 00 Theatre Criticism

The study of the theatre including, frequently, the related arts of film and television emphasizing such elements as esthetics, social impact, and historical perspective.

#### 05.06 08 00 00 Theatre History

The study of the development of dramatic literature, the physical theatre, the elements of production, and the artists and craftsmen who have contributed to our theatre heritage.

#### 05.06 99 00 00 Other Dramatic Arts

Include here other organized subject matter and experiences emphasized in dramatic arts which are not listed above. (Specify.)

#### 05.99 00.00 00 OTHER ENGLISH LANGUAGE ARTS

Include here other organized subject matter and experiences emphasized in English language arts which are not classifiable or listed above. (Specify.)

## FOREIGN LANGUAGES

### 06.00 00 00 00

The body of subject matter in this area is comprised of a variety of foreign languages, including English as a foreign language. Classified under this heading are the various classical and modern foreign languages.

Usually, the activities involved in the teaching and learning of a foreign language are planned in terms of selected objectives:

1. to assist the pupil in acquiring progressive

proficiency in the control of the skills of listening comprehension, speaking, reading, and writing, and in structural analysis;

2. to develop the pupil's capacity to apply these acquired skills in understanding, analyzing, and interpreting a variety of forms of past and current thought;
3. to increase the pupil's knowledge and understanding of the countries, cultures, and attitudes of the peoples whose language is being learned.

The Ad Hoc Committee for Foreign Languages applied the following rationale to the selection of the languages for placement in the Foreign Languages area (1) the various languages selected and classified were determined by the *ad-hoc* committee as including the languages most frequently taught in the United States, and (2) the various languages selected for placement under Classical Languages and Modern Foreign Languages could be defined in brief form using only salient descriptive elements.

Opportunities are frequently provided both during and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of foreign languages as an integral part of the instructional program. As an example, the Foreign Language Club provide additional opportunities to apply various acquired skills, increase knowledge about different countries, and develop appreciation for the role of foreign languages in communication. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146, and they are described more fully in this chapter beginning on page 242. As an illustration, the Foreign Language Club is identified for reporting purposes under Cocurricular Activities as Item 20.01 09 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

The following and other categories of information in chapters 3 and 4 of Handbook VI, when related to a foreign language may provide the type of information represented by "stream" and "level" (which are not defined here). X 03 00. Series Placement, on pages

## 06 FOREIGN LANGUAGES—(Continued)

63-65; X 06 00. Series—Tiem Elements, on pages 66-71; and the X 23 00. Series—Planned Instructional Outcomes for Pupils, on pages 89-90.

### 06.01 00 00 00 CLASSICAL LANGUAGES

Usually considered to be the study of the language, literature, and culture of an ancient civilization. Selected emphases in instruction in any of the classical languages may be identified in the list of items following 06.01 99 00 00. An example might be: language taught, 06.01 01 00 00 *Arabic (classical)*; emphases in instruction, 06.01 01 01 00 *Culture* and 06.01 01 02 00 *Listening Comprehension*.

#### 06.01 01 00 00 Arabic (classical)

The language, literature, and culture of the ancient Arabic world.

#### 06 01 02 00 00 Chinese (classical)

The language, literature, and culture of the ancient Chinese world.

#### 06.01 03 00 00 Greek (classical)

The language, literature, and culture of the ancient Greek world.

#### 06.01 04 00 00 Hebrew (classical/Biblical)

The language, literature, and culture of the ancient Hebrew world.

#### 06.01 05 00 00 Latin (classical)

The language, literature, and culture of the ancient Roman world.

#### 06.01 99 00 00 Other Classical Languages

Include here any other language, literature, and culture of an ancient civilization emphasized in instruction which is not listed under classical languages above. (Specify.)

#### *Selected Emphases:*

06.01 00 01 00 Culture

06.01 00 02 00 Listening Comprehension

06.01 00 03 00 Reading

06.01 00 04 00 Speaking

06.01 00 05 00 Study of Literature

06.01 00 06 00 Translation

06.01 00 07 00 Writing

06.01 00 99 00 Other Selected Emphases

Include here other skills, knowledge, and understanding not included above. (Specify.)

### 06.02 00 00 00 MODERN FOREIGN LANGUAGES

The study of the language, literature, and culture of a selected segment of the population of the modern world. Selected emphases in instruction in any of the modern foreign languages may be identified in the list of items following 06.02 99 00 00. An example might be: language taught, 06.02 06 00 00 *Danish*; emphases in instruction, 06.02 06 01 00 *Culture* and 06.02 06 02 00 *Listening Comprehension*.

#### 06.02 01 00 00 Arabic, Modern Standard

The language, literature, and culture of the Arabic-speaking peoples of the modern world. Modern Standard Arabic, based on classical Arabic, is the most commonly taught and used language as a vehicle of communication among the various Arabic-speaking peoples.

#### 06.02 02 00 00 Arabic, colloquial

The spoken regional language and culture of a given segment of the Arabic-speaking world. (The dialect should be specified.)

#### 06.02 03 00 00 Chinese, modern Mandarin

The official oral language of the Chinese-speaking people of the modern world. The study of modern Mandarin may include literature and culture.

#### 06.02 04 00 00 Chinese, Cantonese

The spoken language and culture of the Cantonese-speaking people.

#### 06.02 05 00 00 Czech

The language, literature, and culture of the Czech-speaking people.

#### 06.02 06 00 00 Danish

The language, literature, and culture of the Danish-speaking people.

#### 06.02 07 00 00 English as a foreign language

The study of the language, literature, and culture of the English-speaking peoples by individuals whose mother tongue is not English.

- 06.02 08 00 00 French  
The language, literature, and culture of the French-speaking people.
- 06.02 09 00 00 German  
The language, literature, and culture of the German-speaking people.
- 06.02 10 00 00 Greek, modern  
The language, literature, and culture of the Greek-speaking people of the modern world.
- 06.02 11 00 00 Hawaiian  
The language, literature, and culture of the Hawaiian-speaking people.
- 06.02 12 00 00 Hebrew, modern (Israeli)  
The language, literature, and culture of the Hebrew-speaking people of the modern world. This is the official language of Israel.
- 06.02 13 00 00 Italian  
The language, literature, and culture of the Italian-speaking people.
- 06.02 14 00 00 Japanese  
The language, literature, and culture of the Japanese-speaking people.
- 06.02 15 00 00 Norwegian  
The language, literature, and culture of the Norwegian-speaking people.
- 06.02 16 00 00 Polish  
The language, literature, and culture of the Polish-speaking people.
- 06.02 17 00 00 Portuguese  
The language, literature, and culture of the Portuguese-speaking people.
- 06.02 18 00 00 Russian  
The language, literature, and culture of the Russian-speaking people. Other languages spoken within the U.S.S.R.—such as Georgian, Ukrainian, and Uzbek—should be recorded under the item, *Other Modern Foreign Languages*.
- 06.02 19 00 00 Spanish  
The language, literature, and culture of the Spanish-speaking people.

06.02 20 00 00 Swedish  
The language, literature, and culture of the Swedish-speaking people.

06.02 99 00 00 Other Modern Foreign Languages  
Include here any other language, literature, and culture of a selected segment of the modern world emphasized in instruction which is not listed under modern foreign languages above. (Specify.)

*Selected Emphases:*

- 06.02 00 01 00 Culture
- 06.02 00 02 00 Listening Comprehension
- 06.02 00 03 00 Reading
- 06.02 00 04 00 Speaking
- 06.02 00 05 00 Study of Literature
- 06.02 00 06 00 Translation
- 06.02 00 07 00 Writing
- 06.02 00 99 00 Other Selected Emphases  
Include here other skills, knowledge, and understanding not included above. (Specify.)

**06.03 00 00 00 HUMANITIES**

The study of a group of subjects such as classical and modern languages, art, music, literature, religion, history, and philosophy—with foreign languages usually forming the core—concerned with man's individual cultural achievements in society as distinguished from social institutions and customs of the natural world. Sometimes aspects of the various subject-matter areas are taught separately; in other instances these aspects of subject matter are fused or integrated. (See also 02.01 03 00 00 *Humanities* under ART; 05.03 69 00 00 *Humanities* under ENGLISH LANGUAGE ARTS; 12.06 00 00 00 *Humanities* under MUSIC, and 05.09 00 00 00 *Humanities* under SOCIAL SCIENCES/SOCIAL STUDIES.)

**HEALTH OCCUPATIONS EDUCATION**

07.00 00 00 00

Education for health occupations comprises the body of related subject matter, or the body of related

## 07 HEALTH OCCUPATIONS EDUCATION— (Continued)

courses, and planned experiences designed to impart knowledge and develop understanding and skills required to support the health professions. Instruction is organized to prepare pupils for occupational objectives concerned with assisting qualified personnel in providing diagnostic, therapeutic, preventive, restorative, and rehabilitative services to people, including understanding and skills essential to provide care and health services to patients.

Education for health workers usually is conducted by recognized education agencies and appropriate health institutions and services that can make available the quality and kind of experiences needed by the trainee in developing the competencies required for his occupational goal.

Instructional programs which prepare persons for occupations that render health services directly to patients provide planned instruction and experience in appropriate clinical situations. For occupations that render health services which do not involve direct services to patients, planned instruction and experience in laboratories and/or appropriate work situations are provided as an integral part of the instructional program.

### *Licensure, Certification, and Registration*

Techniques for the regulation of workers in health occupations have been developed and administered, either by appropriate professional organizations or by legally constituted authority in the respective States, as a means to safeguarding the public against unqualified and/or unscrupulous persons. Therefore, regulatory procedures such as licensure; certification, and/or registration in certain of the health occupations have been established.

*Licensure*—Under the authority of a State, laws are enacted setting forth the minimum qualifications for persons and the standards to be met for practicing in an occupation. All physicians, nurses, dental hygienists, and a growing number of paramedical personnel must be licensed in their respective fields. Organizations representing these groups have sought and helped to establish State laws for licensing practitioners in their fields. They have also found that mandatory regulation of these occupations under State licensure laws best serves the

public interest. Employers, too, have come to rely upon the legal licensing agency for assurance that a practitioner is qualified in his field.

*Certification*—Professional societies endeavor to improve the quality of services provided by supportive personnel in health fields through voluntary certification of individual workers. Standards pertaining to education, experience, and personal qualifications are determined by the professional society, usually in cooperation with the auxiliary group that is subject to the certification procedure. Applicants wishing to become certified under these standards must make application to the certifying board of the association and comply with the certification of standards.

*Registration*—The term registration is used by certain occupational groups interchangeably with either the term licensure or certification. "Registered" nurse connotes a nurse who is licensed to practice as a professional nurse or as a technical-level nurse. A "registered" medical librarian is certified by and registered with her professional association. Registration may be interpreted in specific instances by placing after it (L) when "licensure" applies, or (C) when "certification" applies.

Note: In situations involving designation of "licensure," "certification," or "registration" for record and/or report purposes as applicable to selected items in this subject-matter area, the following symbols may be used. (L) for Licensure, (C) for Certification, and (R) for Registration.

The Ad Hoc Committee for Health Occupations Education applied the following rationale to the selection of substantive content for placement in the Health Occupations Education area: (1) the items selected and classified were determined by consensus of the committee to be representative of the subject matter most commonly taught in health occupations education in the United States; (2) the various aspects of subject matter were identified by titles which were considered as being most commonly used; and (3) the various aspects of subject matter selected for placement under Health Occupations Education could be defined in brief form using only salient descriptive elements.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples, see

the items classified in the X 07 00. Series. - Evaluation and Curriculum Improvement on pages 71-78, and the items classified in the X 32 00. Series.-School Services Supporting Instruction on pages 90-96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included under the heading, Health Occupations Education, are items of information which describe selected aspects of education for health occupations. In the following definitions the term "subject matter" includes theory that may be given either in a school or in a clinical setting, and the term "experiences" includes the applied subject matter which is provided in a clinical setting.

#### 07.01 00 00 00 DENTAL

Included in this category are occupations concerned with supportive services to the dental profession.

#### 07.01 01 00 00 Dental Assisting

A combination of subject matter and experiences designed to prepare a person to assist the dentist at the chairside in the dental operator, to perform reception and clerical functions, and to carry out selected dental laboratory work.

#### 07.01 02 00 00 Dental Hygiene (Associate Degree)

A combination of subject matter and experiences designed to prepare a person to provide services to patients such as performing complete oral prophylaxis, applying medication, and providing dental health education services, both for chair-side patients and in community health programs, under the supervision of the dentist. (Included as 16.03 01 00 00 *Dental Hygiene (Associate Degree)* under TECHNICAL EDUCATION.)

#### 07.01 03 00 00 Dental Laboratory Technology

A combination of subject matter and experiences designed to prepare a person to execute the work in producing restorative appliances required for the oral health of the patient as authorized by the dentist.

#### 07.01 99 00 00 Other Dental

Include here other organized subject matter and experiences emphasized in occupations, not listed above, which are concerned with supportive services to the dental profession. (Specify.)

#### 07.02 00 00 00 MEDICAL LABORATORY TECHNOLOGY

Planned subject matter and laboratory experiences

concerned with bacteriological, biological, and chemical tests to provide data for use in diagnosis and treatment of diseases—using microscopes, micrometers, and other instruments. Persons prepared in this area usually work under the supervision of medical technologists, clinical pathologists, or physicians.

#### 07.02 01 00 00 Cytology (Cytotechnology)

A combination of subject matter and experiences designed to prepare a person to stain and screen smeared slides for determination of abnormalities of exfoliated cells that may assist in the diagnosis of cancer. This work is performed under the supervision of a physician.

#### 07.02 02 00 00 Histology

A combination of subject matter and experiences designed for teaching a person to prepare, section, and stain tissues for microscopic study under the direction of a clinical pathologist.

#### 07.02 03 00 00 Medical-Laboratory Assisting

A combination of subject matter and experiences organized to prepare a person to work under the supervision of medical technologists, clinical pathologists, or physicians to perform routine clinical laboratory procedures. (Included as 16.03 03 00 00 *Medical Laboratory Assisting* under TECHNICAL EDUCATION.)

#### 07.02 04 00 00 Hermatology

A combination of subject matter and experiences organized to prepare a person to collect blood and perform complete blood counts; prepare and stain blood smears; perform hemoglobin determinations; carry out tests to determine bleeding time, coagulation time, sedimentation rate, and prothrombin time; and to determine relative amounts of plasma and corpuscles.

#### 07.02 99 00 00 Other Medical Laboratory

Include here other organized subject matter and experiences emphasized in occupations, not listed or classifiable above, which are concerned with medical laboratory technology. (Specify.)

#### 07.03 00 00 00 NURSING

A combination of subject matter and clinical experiences designed to prepare a person to provide nursing care to patients in hospitals, sanitariums, clinics, or other institutions by administering medications and treatments, assisting the physician during



## 07 HEALTH OCCUPATIONS EDUCATION— (Continued)

treatment and examination of patients, or performing related auxiliary services.

### 07.03 01 00 00 Nursing (Associate Degree)

A combination of general and nursing education and clinical experiences designed to prepare a person for general-duty nursing under the nurse supervisor or physician, or with other members of the health team. (Included as 16.03 05 00 00 *Nursing (Associate Degree)* under TECHNICAL EDUCATION.)

### 07.03 02 00 00 Practical (Vocational) Nurse

A combination of subject matter and supervised clinical experiences designed to prepare a person to give direct nursing care under the supervision of a nurse or physician.

### 07.03 03 00 00 Nursing Assistance (Aide)

A combination of subject matter and experiences which prepares a person to perform simple tasks involved in the personal care of individuals receiving nursing services. These tasks are performed under the supervision of a nurse.

### 07.03 04 00 00 Psychiatric Aide

A combination of subject matter and experiences designed to prepare a person to care for mentally ill patients in a psychiatric medical care facility under direction of nursing and medical staff. Included is instruction in patient hygiene and grooming, feeding, obtaining laboratory specimens, observing patients for unusual behavior, methods of aiding in restraining patients to prevent injury to themselves or others, and encouraging participation in social and recreational activities.

### 07.03 05 00 00 Surgical Technician (Operating Room Technician)

A combination of subject matter and experiences designed to prepare a person to serve as a general technical assistant on the surgical team in the operating suite.

### 07.03 06 00 00 Obstetrical Technician

A combination of subject matter and experiences designed to prepare a person to assist in the care of mothers in labor and delivery rooms before, during, and after delivery under the supervision of professional personnel.

### 07.03 07 00 00 Home Health Aide

A combination of subject matter and experiences designed to prepare a person to assist the elderly, convalescent, or handicapped in their homes and to provide for their daily living needs which may be described as physical, mental, emotional, social, and spiritual.

### 07.03 08 00 00 School Health Aide

A combination of subject matter and experiences designed to prepare a person to assist the physician or nurse with physical examinations, health education, and the conduct of ongoing programs for improving or maintaining students' health.

### 07.03 99 00 00 Other Nursing

Include here other organized subject matter and experiences emphasized in occupations, not listed or classifiable above, which are concerned with nursing. (Specify.)

## 07.04 00 00 00 REHABILITATION

A combination of subject matter and experiences designed to prepare a person to work under the direction of a physician and the supervision of other appropriate specialists in assisting handicapped persons to overcome or compensate for any loss of function, and to restore the individual's physical and/or mental health to an optimum level.

### 07.04 01 00 00 Occupational Therapy

A combination of subject matter and experiences designed to prepare a person to assist the professional occupational therapist in implementing the plan of therapy for a patient as prescribed by a physician.

### 07.04 02 00 00 Physical Therapy

A combination of subject matter and experiences designed to prepare a person to assist the professional physical therapist in implementing the plan of therapy for a patient as prescribed by a physician.

### 07.04 03 00 00 Prosthetics

A combination of subject matter and experiences designed to prepare a person to write specifications for and to make and fit artificial limbs, following the prescription of a qualified medical practitioner. Instruction includes the study of anatomy, biomechanics, engineering as related to prosthetic appliances, and shop experience in prosthetic construction.

#### 07.04 04 00 00 Orthotics

A combination of subject matter and experiences designed to prepare a person to write specifications for and to make and fit braces and appliances for body deformities and disorders, following the prescription of a qualified medical practitioner. Instruction includes the study of anatomy, biomechanics, engineering, as related to orthotic appliances, and shop experience in orthotic construction.

#### 07.04 99 00 00 Other Rehabilitation

Include here other organized subject matter and experiences emphasized in occupations, not listed or classifiable above, which are concerned with rehabilitation. (Specify.)

#### 07.05 00 00 00 RADIOLOGIC

A combination of subject matter and experiences designed to prepare a person to apply roentgen rays and radioactive substances to patients for diagnostic and therapeutic purposes. Instruction may include the study of anatomy, physiology, radiation physics, radiographic techniques, chemistry of processing and dark-room technique, radiation protection, and equipment maintenance.

#### 07.05 01 00 00 Radiologic Technology (X-ray)

A combination of subject matter and experiences designed to prepare a person for the safe use of X-ray equipment in clinical settings under the supervision of a radiologist or other physician. (Included as 16.03 04 00 00 *Radiologic Technology (X-ray)* under TECHNICAL EDUCATION.)

#### 07.05 02 00 00 Radiation Therapy

A combination of subject matter and experiences designed to prepare a person to use radiation producing devices to administer therapeutic treatments as prescribed by a radiologist.

#### 07.05 03 00 00 Nuclear Medical Technology

A combination of subject matter and experiences designed to enable a person, working under a qualified physician, to prepare, administer, and measure radioactive isotopes in therapeutic, diagnostic, and tracer studies, utilizing and maintaining safe storage and handling of a variety of radioisotope equipment.

#### 07.05 99 00 00 Other Radiologic

Include here other organized subject matter and experiences emphasized in occupations, not listed or

classifiable above, which are concerned with radiologic. (Specify.)

#### 07.06 00 00 00 OPHTHALMIC

A combination of subject matter and experiences designed to prepare a person, working under the supervision of an ophthalmologist or optometrist, to perform tests, administer treatment preliminary to examination or surgery, prepare and fit eyeglasses or contact lenses, and direct corrective eye exercises.

#### 07.06 01 00 00 Ophthalmic Dispensing

A combination of subject matter and experiences designed to train a person to prepare, assemble, and fit corrective lenses as prescribed by a physician or optometrist.

#### 07.06 02 00 00 Orthoptics

A combination of subject matter and experiences designed to prepare a person, working under the supervision of an ophthalmologist, to teach others with correctable focusing defects to develop and use binocular vision (focusing of both eyes).

#### 07.06 03 00 00 Optometrist Assistant

A combination of subject matter and experiences designed to prepare a person to assist an optometrist in making tests to determine defects in vision, preparing and fitting eyeglasses or contact lenses, administering corrective eye exercises, or other treatment that does not require drugs or surgery.

#### 07.06 99 00 00 Other Ophthalmic

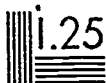
Include here other organized subject matter and experiences emphasized in occupations, not listed or classifiable above, which are concerned with ophthalmic. (Specify.)

#### 07.07 00 00 00 ENVIRONMENTAL HEALTH

A combination of subject matter and experiences designed to prepare a person, working under the supervision of a specialist, to recognize and evaluate environmental hazards such as radiation, fungi, air pollution, waste and sewage, noise, vibration, and poor lighting, and to prescribe methods of eliminating or controlling them.

#### 07.07 01 00 00 Environmental Health Assistant

A combination of subject matter and experiences designed to prepare a person to assist sanitary engineers, scientists, physicians, and veterinarians to gather data on, inspect, and evaluate facilities and



28

2.5

32

2.2

36

2.0



• 07 HEALTH OCCUPATIONS EDUCATION—  
(Continued)

industries concerned with the public, such as water supply, the food industry (processing, distribution, and service), and sewage disposal facilities and plants.

07.07 02 00 00 Radiological Health Technician

A combination of subject matter and experiences designed to prepare a person to conduct radiological evaluations of exposure to X-ray, gamma, and alpha emitters, and to recommend measures to insure maximum protection.

07.07 03 00 00 Sanitarian Assistant

A combination of subject matter and experiences designed to prepare a person, under supervision of a professional sanitarian, to determine compliance with or violation of public sanitation laws and regulations. These persons take samples of such materials as water, food, and air, and perform contamination tests.

07.07 99 00 00 Other Environmental Health

Include here other organized subject matter and experiences emphasized in occupations, not listed or classifiable above, which are concerned with environmental health. (Specify.)

07.08 00 00 00 MENTAL HEALTH TECHNOLOGY

A combination of subject matter and experiences designed to prepare a person to assist professionals in the mental health services.

07.08 01 00 00 Mental Health Technician

A combination of subject matter and experiences designed to prepare a person to assist nursing and medical personnel in rehabilitating mentally ill patients through recreational and occupational activities, training in new patterns of living, physical care of patients, and giving prescribed medication.

07.08 02 00 00 Mental Retardation Aide

A combination of subject matter and experiences designed to prepare a person to attend to the physical needs and well-being of mentally retarded patients and to aid in teaching and recreation processes under the supervision of professional staff members.

07.08 99 00 00 Other Mental Health Technology

Include here other organized subject matter and experiences emphasized in occupations, not listed or classifiable above, which are concerned with mental health technology. (Specify.)

07.09 00 00 00 MISCELLANEOUS HEALTH OCCUPATIONS EDUCATION.

Include here other health occupations education programs not elsewhere classified which prepare a person to provide specified medical and health services.

07.09 01 00 00 Electroencephalograph Technician

A combination of subject matter and experiences designed to prepare a person to operate electrical equipment which records brain waves on a graph to be used by a medical practitioner in diagnosing brain disorders. Instruction in minor repairs and maintenance of equipment may be included. (Included as 16.03 02 00 00 *Electroencephalograph Technician* under TECHNICAL EDUCATION.)

07.09 02 00 00 Electrocardiograph Technician

A combination of subject matter and experiences designed to prepare a person to operate an electrocardiograph machine; recording electromotive variations in the action of heart muscle, and to provide data for diagnosis and treatment of heart ailments by a physician. Instruction in minor repairs and maintenance of equipment may be included.

07.09 03 00 00 Inhalation Therapy

Preparation includes a combination of subject matter and experiences designed to prepare a person to perform procedures and operate and maintain equipment used in supporting respiratory functions, including the administration of oxygen and other sustaining gases, as directed by a physician.

07.09 04 00 00 Medical Assistant (Assistant in physician's office)

A combination of subject matter and experiences designed to prepare a person to perform functions and follow procedures concerned with diagnosis and treatment of patients in a physician's office. Instruction includes physical examinations, laboratory tests, X-rays, measurements, and medications.

07.09 05 00 00 Central Supply Technician

A combination of subject matter and experiences designed to prepare a person to adjust, clean, sterilize, and assemble hospital equipment, supplies, and instruments according to prescribed procedures and techniques. Also included in instruction are inspection, evaluation and recommendation for purchase of equipment and materials, and distribution and inventory.

07.09 06 00 00 Community Health Aide

A combination of subject matter and experiences designed to prepare a person to serve as liaison between professional health workers and the recipients of health services. Instruction emphasizes basic understanding of biology, communicable diseases, environmental health, personal hygiene, infants, medicines, and family and community resources.

07.09 07 00 00 Medical Emergency Technician

A combination of subject matter and experiences designed to prepare technicians to become members of the health team, responsible to professional members, qualified to (a) respond to medical emergency calls, (b) evaluate the nature of the emergencies, (c) take appropriate prompt action to reduce the medical hazards to the receiving station, and (d) serve as technical assistant to the emergency-room staff of general hospitals.

07.09 08 00 00 Food Service Supervisor

A combination of subject matter and experiences designed to prepare a person to understand the nature of nutritional diseases and the importance of controlled diets in the treatment of patients with such diseases in a hospital or other health institution under the supervision of a dietitian. Instruction includes inspection of special diet trays and evaluation of patients' responses to diets.

07.09 09 00 00 Mortuary Science

A combination of subject matter and experiences designed to prepare a person to perform the sanitary and embalming preparations for interment in conformity with legal requirements.

07.09 10 00 00 Orthopedic Assisting

A combination of subject matter and experiences designed to prepare a person to assist an orthopedic specialist in preserving, restoring, and developing the form and function of the extremities, spine, and associated structures by medical, surgical, and physical methods.

07.99 00 00 00 OTHER HEALTH OCCUPATIONS EDUCATION

Include here other subject matter and experiences emphasized in health occupations education which are not listed or classifiable above. (Specify.)

HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION AND RECREATION

08.00 00 00 00

The body of related subject matter and activities in health and safety in daily living, physical education, and recreation are organized for carrying on learning experiences concerned with developing (1) knowledge, attitudes, appreciations, and conduct essential to individual and group health, (2) awareness of, concern for, and knowledge, skills, and judgment necessary for practicing and promoting personal and public safety in the home, at school, on the job, and in traffic; and (3) physical and mental growth and fitness by means of activities designed to improve the muscles, motor skills, and attitudes and habits of conduct of individuals and groups.

The Ad Hoc Committee for Health and Safety in Daily Living, Physical Education, and Recreation applied the following rationale to the selection of items for placement in the Health and Safety in Daily Living, Physical Education, and Recreation area: (1) the items were determined by consensus of the committee to be especially appropriate to health and safety in daily living, physical education, and recreation; (2) the items could be defined in brief form using only salient descriptive elements; and (3) the various items were identifiable by titles which the *ad hoc* committee considered to be most commonly used in current practice.

Opportunities are frequently provided both during and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of health and safety in daily living, physical education and recreation as an integral part of the instructional program. As an example, the Girls' Athletic Association provides additional opportunities to develop leadership, citizenship, and other qualities. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. They may be designed for participation of pupils as individuals or in groups. A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146; and they are described more fully in this chapter beginning on page 242. As an illustration, the Girls' Athletic Association is identified for reporting purposes and further described under Cocurricular Activities as Item 20.02 11 00 00.

Many items of information in chapter 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see

## 08 HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION AND RECREATION—(Continued)

the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included under this heading are the items of information which identify various aspects of subject matter and learning activities in health, safety in daily living, physical education, and recreation.

### 08.01 00 00 00 HEALTH

Learning activities which utilize experiences for influencing understanding, attitudes, and practices relating to individual, family, and community health. Instruction is based on scientific facts and truths which serve as a foundation for decisionmaking and action to achieve health potentials.

#### 08.01 01 00 00 Community Health

The study of (1) the availability and accessibility of public, private, and voluntary health services and facilities; (2) the functions and services of local, State, and Federal health agencies, including public, voluntary, and professional; and (3) prevailing health conditions in the community.

#### 08.01 02 00 00 Consumer Health

Learning experiences designed to help pupils develop the ability to make sound decisions in the selection and utilization of health services, the selection of health and accident insurance, and the purchase of health products. Emphasis is also on developing knowledge essential for recognizing quackery and false advertising in relation to foods, drugs, and mechanical devices.

#### 08.01 03 00 00 Disease Prevention and Control: Communicable and Chronic

The study of the cause, control, and prevention of disorders which impair health, with emphasis on prevention. The various diseases are usually categorized under two headings—"communicable" and "chronic." The former includes diseases which can be transferred from one person to another, such as tuberculosis, venereal diseases, and measles; the latter includes diseases such as cancer, heart disease, multiple sclerosis, and cerebral palsy.

#### 08.01 04 00 00 Environmental Health.

Learning experiences designed to help the pupil understand the effect upon man's health and well-being of such environmental factors as water supply, pollution control, food contamination, air pollution, radiation exposure, crowdedness, noise, and mobility.

#### 05.01 05 00 00 Family Life Education (including Sex Education)

The study of the family as an entity and as a unit in the community; the physical, psychological, sociological, and emotional aspects of growth toward maturity; and the biology of reproduction.

#### 08.01 06 00 00 First Aid

Learning experiences designed to (1) develop understanding and skills necessary, in time of emergency, to prevent the death or further injury of a person until the services of a physician can be obtained, and (2) provide instruction concerning the national program of medical self-help.

#### 08.01 07 00 00 Growth and Development

The study and development of understanding concerning the physical, mental, emotional, and social changes which occur in human development from conception through adulthood. Included are such areas as body structure and function, heredity, environmental influences, and differences and likenesses among people.

#### 08.01 08 00 00 Harmful Substances

The study of the effects of the misuse of alcohol and the use of tobacco, narcotics, dangerous drugs, volatile chemicals, tranquilizers, and similar products on individuals, families, and communities. Also included and emphasized is information on poisons, poisonous plants, and poison control centers.

#### 08.01 09 00 00 Health Careers

The exploration and study of professional, semiprofessional, technical, and allied occupational opportunities which contribute directly to the health and well being of people. Areas emphasized for exploration include medicine, dentistry, nursing, dental hygiene, research technology, laboratory technologies, dietetics, nurses' aides, and supporting services.

#### 08.01 10 00 00 Health Maintenance and Care

Organized learning experiences directed toward helping the individual to assume responsibility for

attaining optimum personal health through giving attention to such factors as the development and maintenance of personal fitness (physical fitness); a balance in exercise, work, sleep and rest, relaxation and recreation; and body care and grooming.

08.01 10 01 00 Foods and Nutrition  
(For definition see 09.01 07 00 00 *Foods and Nutrition* under HOME ECONOMICS.)

08.01 10 02 00 Dental Health  
Learning experiences designed to develop knowledge and understanding concerning the growth and structure of the teeth, causes and prevention of tooth decay and other dental diseases, and sound practices in the care of the teeth and gums (mouth).

08.01 10 03 00 Physical Fitness: exercise, work, sleep, rest, relaxation, and recreation  
Learning experiences designed to help pupils develop understanding and desirable attitudes regarding the relationship between vigorous exercise and health and the need for balance among exercise, rest, sleep, relaxation, work, and recreation.

08.01 10 04 00 Personal Grooming and Body Care  
Learning experiences designed to develop in the pupil good practices in grooming, dress, cleanliness and body care, e.g., face, ears, and eyes.

08.01 10 05 00 Mental Health  
Experiences and conditions directed toward helping the pupil develop the ability to adapt to his environment, to perceive reality accurately, to manage stress healthfully, to stand on his own two feet, and to learn and to develop a feeling of well-being.

08.01 10 99 00 Other Health Maintenance and Care  
Include here other organized subject matter and experiences emphasized in health-maintenance and care which are not listed above. (Specify.)

08.01 11 00 00 International Health  
An organization of subject matter concerned with the cooperation between two or more nations for (1) the prevention and control of disease, and (2) the improvement of personal and community health—both aimed toward accelerating social and economic development.

08.01 99 00 00 Other Health  
Include here other organized subject matter and

experiences emphasized in health education which are not listed or classifiable above. (Specify.)

#### 08.02 00 00 00 SAFETY IN DAILY LIVING

Subject matter and learning experiences concerned with developing in individuals (1) an awareness and understanding of hazards of every day living, and (2) the knowledge, habits, attitudes, and skills which will enable them to function at optimum level in the presence of hazards.

08.02 01 00 00 Explosives  
(For definition see 21.02 02 00 00 *Explosives* under SAFETY AND DRIVER EDUCATION.)

08.02 02 00 00 Firearms  
The study of the proper use of firearms, including knowledge of the gun and its working mechanism, its use in hunting, trap and skeet shooting, marksmanship, and legal requirements related to firearms.

08.02 03 00 00 Fire Safety  
The study of fire safety emphasizing subject matter and learning experiences designed to develop desirable attitudes regarding fire prevention and fire waste, and help pupils understand the hazards and benefits of fire, including causes and preventive measures. Consideration is given to various common hazards such as smoking, matches, electricity, heating units, explosive materials, rubbish, outdoor fires, lightning, construction defects, and procedures to be followed in case of fire, e.g., escape plans and fighting fires.

08.02 04 00 00 Holiday and Vacation Safety  
A familiarization with and study of hazards as they apply to Halloween, including costumes, tricks and treating, and traffic safety; Christmas, including hazards of shopping, decorating, preparing a safe Christmas tree, and electrical equipment. Other holidays often given attention are Memorial Day (parades, traffic); Fourth of July (fireworks and explosives); Labor Day, Veteran's Day, New Year's Day (drinking and driving); Easter; Yom Kippur (use of candelabra in fire-safe place); Thanksgiving; and Arbor Day (proper and safe use of garden tools).

A study of vacation safety is emphasized, including constant changing of the environment necessitating more self-responsibility due to less supervision than at other times. Frequently considered are playgrounds, parks and camping areas, public places (stores, churches, libraries, theatres), public transportation, ex-



08 HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION AND RECREATION—(Continued).

ursions, general recreational areas (picnicking, hiking), fishing, bathing and swimming, canoeing, sunburn and exposure, and traffic safety.

08.02 05 00 00 Personal Responsibility in Unsupervised Activities

Learning experiences designed to develop in pupils self-responsibility and responsibility for others as they participate in unsupervised activities. Consideration is usually given to the following areas: (1) safe play sites, (2) sportsmanlike conduct, (3) respect for property, (4) places to avoid, (5) strangers, and (6) what to do in case of an accident. (Included as 21.02 04 00 00 *Personal Responsibility in Unsupervised Activities* under SAFETY AND DRIVER EDUCATION.)

08.02 06 00 00 Safety in the Home

Learning experiences and activities designed to help pupils understand the hazards in and around the home including falls, burns, gas poisoning, poisons, mechanical suffocation, firearms, home workshops, garden tools, and power mowers; electrical fixtures and appliances; treatment of cuts, scratches, and bruises; animals; and engaging a baby sitter. (Included as 21.02 05 00 00 *Safety in the Home* under SAFETY AND DRIVER EDUCATION.)

08.02 07 00 00 Safety in Physical Education and Recreation

Learning experiences and activities designed to develop in pupils an understanding of the hazards in physical education (including sports) and recreational activities; acceptance of responsibility for their own safety and that of fellow participants; and essential knowledge, skills, habits, and attitudes for safe participation. These learning experiences are emphasized as an integral part of instruction in *physical education* and *recreation*.

08.02 08 00 00 School Safety

A study of safety in and around the school—in playgrounds, and in halls and stairs, classrooms, and washrooms. Also emphasized in instruction are the responsibilities of the administration, teachers, pupils, custodians, and parents. (Included as 21.02 06 00 00 *School Safety* under SAFETY AND DRIVER EDUCATION.)

08.02 09 00 00 Traffic Safety

(For identification see 21.02 07 00 00 *Traffic Safety* under SAFETY AND DRIVER EDUCATION.)

08.02 09 01 00 Bicycle, Motor Bike, other

(For definition see 21.02 07 01 00 *Bicycle, Motor Bike, other* under SAFETY AND DRIVER EDUCATION.)

08.02 09 02 00 Passenger

(For definition see 21.02 07 02 00 *Passenger* under SAFETY AND DRIVER EDUCATION.)

08.02 09 03 00 Pedestrian

(For definition see 21.02 07 03 00 *Pedestrian* under SAFETY AND DRIVER EDUCATION.)

08.02 09 04 00 Student Patrol

(For definition see 21.02 07 04 00 *Student Patrol* under SAFETY AND DRIVER EDUCATION.)

08.02 09 99 00 Other Traffic Safety

Include here other organized subject matter and experiences emphasized in traffic safety which are not listed above or in the category 21.02 07 00 00 *Traffic Safety* under SAFETY AND DRIVER EDUCATION. (Specify.)

08.02 10 00 00 Vocational and Occupations Safety

Learning experiences concerned with unsafe working areas and conditions and unsafe personal conduct, including causes and effects. Safety practices are emphasized as related to a wide range of situations, e.g., the handling and storing of a variety of objects, machine operations, use of tools, the environment, fire prevention and protection, on-the-job instruction, accident reporting, rules and off-the-job accidents. (Included as 21.02 08 00 00 *Vocational and Occupational Safety* under SAFETY AND DRIVER EDUCATION.)

08.02 11 00 00 Water Safety

Learning experiences and activities designed to provide instruction emphasizing safety in swimming, diving, water sports, skin and scuba diving, handling of small crafts, skiing, surfacing, health precautions, and rescue skills.

08.02 99 00 00 Other Safety in Daily Living

Include here other organized subject matter and experiences emphasized in safety in daily living which are not listed above. (Specify.)

## 08.03 00 00 00 PHYSICAL EDUCATION

Organized, sequential, and systematic application of the concepts and principles of the art and science of human movement through the teaching-learning medium of physical activities. The types of planned movement experiences are organized under various descriptive titles such as Adapted Physical Education; Aquatics; Body Dynamics; Dance, Rhythms, and Dramatic Activities; Group Games, Contests, and Relays; Individual and Dual Sports, Outdoor Recreational Activities; Stunts, Tumbling, and Gymnastics; and Team Sports. With movement as its central focus, physical education is directed primarily to:

- a. The pupil's ability and capability to move;
- b. The use he makes of his movement ability for essential purposes such as survival, health maintenance and improvement, fitness, education for leisure, communication, and expression; and
- c. The relationship of his movement to his physical and social environment and to other aspects of his total growth and development.

In the area of physical education several classified items are not defined because of their obvious and well-understood meaning, e.g., Baseball, Basketball, Football, Water Games, and Folk Dance.

### 08.03 01 00 00 Adapted Physical Education

Planned, diversified, and highly personalized physical activities suited to the special needs of pupils having atypical physical, mental, and/or behavioral conditions of temporary or enduring nature, and who may not safely or successfully participate unrestrictedly in the vigorous activities of the regular instructional program of physical education. Instruction provides for *corrective* and *remedial* physical education and *recreational adaptations* as needed.

### 08.03 02 00 00 Aquatics

Organized activities, in or on the water, designed to provide opportunities for pupils to experience activities such as swimming, diving, lifesaving, synchronized swimming, water games, handling small crafts, skin and scuba diving, waterskiing, and surfing. (The following items are not defined because of their being commonly understood.)

#### 08.03 02 01 00 Diving

#### 08.03 02 02 00 Lifesaving

#### 08.03 02 03 00 Skin and Scuba Diving

#### 08.03 02 04 00 Small Crafts

#### 08.03 02 05 00 Surfing

#### 08.03 02 06 00 Swimming

#### 08.03 02 06 00 Synchronized Swimming

#### 08.03 02 08 00 Water Games

#### 08.03 02 09 00 Water Skiing

#### 08.03 02 99 00 Other Aquatics

Include here other organized subject matter and experiences emphasized in aquatics which are not listed above. (Specify.)

### 08.03 03 00 00 Body Dynamics

Planned physical activities based primarily on the pupil's special needs and desires for self-discovery, self-evaluation, self-direction, and self-management in maintaining, motivating, and improving his general level of total fitness and achievement of better performance in special tasks and in daily living. These activities include Conditioning Exercises, Fundamental Movements, Individual Self-testing Events, and Posture Education.

#### 08.03 03 01 00 Conditioning Exercises

Activities involving invented, nonplayful, systematic movements—individually or teacher-directed—designed specifically to strengthen muscle groups, prepare the body for more strenuous effort, or improve efficiency of performance and appearance. Specific kinds of movement experiences include calisthenics or free exercises, weight training, and exercises with specialized equipment or apparatus.

#### 08.03 03 02 00 Fundamental Movements

Planned experiences involving a series of basic, natural movements, common to all physical activities such as creeping, crawling, walking, running, hopping, skipping, leaping, jumping, throwing, and climbing.

#### 08.03 03 03 00 Individual Self-testing Events

Physical activities concerned with measurable and scorable events, based on the pupil's desire to test his own physical abilities in the elements or specific skills of sports and games, e.g., the football throw and kick for distance and accuracy, the baseball throw for strikes and distance, baskets per minute with the basketball, and the volleyball serve for accuracy.

08 HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION AND RECREATION—(Continued)

08.03 03 04 00 Posture Education

The study of the mechanics of the body and the most efficient and esthetic patterns of body alignment and performance in a variety of daily activities, including the relationship of balance, strength, flexibility, agility, and proper clothing and environmental factors to efficient postures in physical activity, work, rest, and relaxation.

08.03 03 99 00 Other Body Dynamics

Include here other organized subject matter and experiences emphasized in body dynamics not listed above. (Specify.)

08.03-04 00 00 Dance, Rhythms, and Dramatic Activities

Activities which are imitative or creative expressions of movement designed to communicate ideas and feelings. A wide variety of rhythmic, space, and movement patterns are involved, including.

08.03 04 01 00 Dance (Physical Education)

Organized activity performed by pupils, alone or with others, in patterns of sequential movements in rhythm, usually accompanied by music. Various types of dances are organized under such descriptive titles as folk, square, modern, and social.

08.03 04 01 01 Folk Dance

08.03 04 01 02 Modern Dance

08.03 04 01 03 Social Dance

08.03 04 01 04 Square Dance

08.03 04 02 00 Rhythms

Organized activities, usually comprised of singing games and the performance of the fundamental movements in a variety of tempos and space patterns, with musical accompaniment.

08.03 04 03 00 Dramatic Activities

Activities designed to be imitative or creative in nature with or without the use of music. Activities include folk festivals, free play, mimetics, pageantry, and story plays.

08.03 04 03 01 Folk Festival

08.03 04 03 02 Free Play

08.03 04 03 03 Mimetics

08.03 04 03 04 Pageantry

08.03 04 03 05 Story Play

08.03 04 03 99 Other Dramatic Activities

Include here other organized subject matter and experiences emphasized in dramatics which are not listed above. (Specify.)

08.03 05 00 00 Group Games Contests, and Relays

Planned developmental activities which provide opportunities for physical interactions among pupils in either cooperative or competitive situations. The activities are developed on a progressive and sequential basis from the very simple to the complex, and include duck-in-the-pond, dodge ball, partner tag, chicken fight, Indian wrestling, tug-o-war, and various types of relays.

08.03 06 00 00 Individual and Dual Sports

Planned physical activities, with high carry-over possibilities for lifetime use, generally involving participation by one or two pupils competing against one or two pupils in the same activity according to predetermined rules. Such activities include the following, which are not defined here because of their obvious and well-understood meanings.

08.03 06 01 00 Archery

08.03 06 02 00 Badminton

08.03 06 03 00 Bowling

08.03 06 04 00 Fencing

08.03 06 05 00 Golf

08.03 06 06 00 Handball

08.03 06 07 00 Tennis

08.03 06 08 00 Track and Field

08.03 06 09 00 Wrestling

08.03 06 99 00 Other Individual and Dual Sports

Include here other organized subject matter

and experiences emphasized in individual and dual sports which are not listed above. (Specify.)

08.03 07 00 00 Outdoor Recreational Activities

Planned learning experiences which are usually organized as noncompetitive, voluntary, out-of-door diversions conducted in a natural setting, often away from the school environment. Among such activities are the following, which are not defined here because of their obvious and well-understood meanings.

08.03 07 01 00 Camping

08.03 07 02 00 Cycling

08.03 07 03 00 Fishing

08.03 07 04 00 Hunting

08.03 07 04 01 Bow Hunting

08.03 07 04 02 Rifle Hunting

08.03 07 04 03 Shotgun Hunting

08.03 07 04 99 Other Hunting (Specify.)

08.03 07 05 00 Ice Skating

08.03 07 06 00 Orienteering

Planned activities using a map for guidance and a compass for direction by means of which persons navigate cross-country from one point to another. Emphasis is on computing and adapting knowledge from an ordnance survey map to determine the shortest way between two points but choosing the quickest way around high cliffs and water regions.

08.03 07 07 00 Riding

08.03 07 08 00 Skin and Scuba Diving

08.03 07 09 00 Small Crafts

08.03 07 09 01 Boating

08.03 07 09 02 Canoeing

08.03 07 09 03 Rowing

08.03 07 09 04 Sailing

08.03 07 09 99 Other Small Crafts

Include here other organized subject matter and experiences emphasized in small crafts which are not listed above. (Specify.)

08.03 07 10 00 Snowskiing

08.03 07 10 01 Cross-country Skiing

08.03 07 10 02 Downhill Skiing

08.03 07 10 03 Jump Skiing

08.03 07 11 00 Surfing

08.03 07 12 00 Waterskiing

08.03 07 99 00 Other Outdoor Recreational Activities

Include here other organized subject matter and experiences emphasized in outdoor recreational activities which are not listed above. (Specify.)

08.03 08 00 00 Stunts, Tumbling, and Gymnastics

A series of activities designed to provide the pupil an opportunity to perform formal movements in various combinations, and to create new movements while participating in activities such as balancing, building pyramids, performing novel antics and actions as an individual, with a partner, or in a group. Such activities involve vaulting over various apparatus and exercising on mats, parallel bars, a horizontal bar, rings, ropes, the side horse, or trampoline. Among the activities are the following, which are not defined here because of their obvious and well-understood meanings.

08.03 08 01 00 Balance Beam

08.03 08 02 00 Building Pyramids

08.03 08 03 00 Parallel Bars

08.03 08 04 00 Horizontal Bars

08.03 08 05 00 Rings

08.03 08 06 00 Ropes

08.03 08 07 00 Side Horse

08.03 08 08 00 Trampoline

**08 HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION AND RECREATION—(Continued)**

**08.03 08 99 00 Other Stunts, Tumbling, and Gymnastics**

Include here other organized subject matter and experiences emphasized in stunts, tumbling, and gymnastics which are not listed above. (Specify.)

**08.03 09 00 00 Team Sports**

Planned physical activities involving relatively complex rules and strategy in which success is partially determined by the degree of group cooperation in competing successfully against comparable opponents in the same activity according to predetermined rules. Such learning experiences and activities include the following which are not defined here because of their obvious and well-understood meanings:

**08.03 09 01 00 Baseball**

**08.03 09 02 00 Basketball**

**08.03 09 03 00 Cross Country**

**08.03 09 04 00 Curling**

**08.03 09 05 00 Field Hockey**

**08.03 09 06 00 Football**

**08.03 09 07 00 Ice Hockey**

**08.03 09 08 00 Lacrosse**

**08.03 09 09 00 Soccer**

**08.03 09 10 00 Softball**

**08.03 09 11 00 Speed-a-way**

**08.03 09 12 00 Speedball**

**08.03 09 13 00 Volleyball**

**08.03 09 14 00 Water Polo**

**08.03 09 99 00 Other Team Sports**

Include here other organized subject matter and experiences emphasized in team sports which are not listed above. (Specify.)

**08.03 99 00 00 Other Physical Education**

Include here other organized subject matter and experiences emphasized in physical education which are not classifiable or listed above. (Specify.)

**08.04 00 00 00 RECREATION**

Subject matter and experiences organized as an integral part of both the planned instructional program and the cocurricular and recreational program. When these activities are taught in areas such as science, music, physical education, English-language arts, or mathematics, they are part of the instructional program. When they are voluntary, school sponsored and supervised, and generally not for credit, they become part of the cocurricular and recreational activities program. The following recreational and cocurricular activities are frequently emphasized. (Outdoor Recreation, Performing Arts, Drama, Music, Physical Recreation, and Voluntary Service are not defined because of their obvious and well-understood meanings.)

**08.04 01 00 00 Arts and Crafts**

Instruction designed to provide pupils with opportunities for creative expression and communication in which one's hands are used to translate culture and personality into objects of reality for personal satisfaction, and to develop an appreciation for well-designed objects, e.g., sculpturing, weaving, pottery-making, whittling, metalworking, leathercraft, and clay modeling.

**08.04 02 00 00 Communicative Arts**

Reading, writing, speaking, and language activities which offer both personal enjoyment and creative experiences, e.g., the Great Books Program, reading for others, personal improvement reading, business and letter writing, creative and technical writing, poetry, public speaking, foreign language clubs, and discussion groups.

**08.04 03 00 00 Hobbies**

Recreation activities which are happily pursued with great interest over a sustained period of time. Although basically an individual pursuit, they can and often do lead to group and club participation. Hobbies are as varied as the field of human interest and experience but usually can be encompassed under four categories: collecting (coins, stamps, insects, autographs); creating (writing, home mechanics, gardening, painting, designing, photography); educational (astronomy, ornithology, mineralogy, horticulture); and performing (sports, music, hiking).

08.04 04 00 00 Outdoor Recreation

08.04 05 00 00 Performing Arts

08.04 05 01 00 Dance

A form of expression through movement in response to rhythm. Through a variety of forms it is planned to provide pleasure and satisfaction as a social and creative activity, e.g., folk, square, social, modern, mixers, creative rhythms, tap, clog, and ballet. It may be conducted on an individual or group basis.

08.04 05 02 00 Drama

08.04 05 03 00 Music

08.04 05 99 00 Other Performing Arts

Include here other organized subject matter and experiences emphasized in performing arts which are not listed above. (Specify.)

08.04 06 00 00 Physical Recreation

08.04 07 00 00 Voluntary Service

08.04 99 00 00 Other Recreation

Include here other organized subject matter and experiences emphasized in recreation which are not listed above. (Specify.)

## HOME ECONOMICS

09.00 00 00 00

Home economics comprises the group of related courses or units of instruction organized for purposes of enabling pupils to acquire knowledge and develop understanding, attitudes, and skills relevant to (a) personal, home, and family life, and (b) occupational preparation using the knowledge and skills of home economics. The subject matter of home economics includes, in addition to that which is unique to the area, concepts drawn from the natural and social sciences and the humanities.

The Ad Hoc committee for Home Economics applied the following rationale to the selection of the items for placement in the Home Economics area: (1) the items were determined by consensus of the committee to be appropriate to home economics in terms of preparation for personal, home, and family living, and for occupational preparation; (2) the items could be defined in brief form using only salient descriptive elements, and

(3) the various items classified under Home Economics were identifiable by titles which were considered to be in current use in home economics.

Opportunities to develop leadership, social and civic awareness, and increased understanding of the world of work in home economics are provided through the Future Homemakers of America, a youth organization for home economics pupils. As an integral part of the instructional program, pupils in this organization engage in activities that extend their interests, skills, and knowledge in many aspects of home economics. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146; they are discussed more fully in this chapter beginning on page 242. The Future Homemakers of America are identified for reporting purposes and further described under Cocurricular Activities as Item 20.01 12 00 00.

Many items of information in chapter 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07. 00. Series-Evaluation and Curriculum Improvement on pages 71-78, and the items classified in the X 32 00. Series-School Services Supporting Instruction on pages 90-96. Graphic illustrations of these relationships are shown in table 7 on page 11, and in figure 2 on page 13.

The following descriptive headings identify the various aspects of home economics.

### 09.01 00 00 00 HOMEMAKING: PREPARATION FOR PERSONAL, HOME, AND FAMILY LIVING

The courses or units of instruction in home economics which emphasize acquisition of knowledge and the development of understanding, attitudes, and skills relevant to personal, home, and family life in the areas described below.

#### 09.01 01 00 00 Comprehensive Homemaking or Home Economics

Instruction which derives content from a combination of the various areas of homemaking (as described by the items listed below) and emphasizes basic principles and interrelationships among these areas.

#### 09.01 02 00 00 Child Development

The study of children—their physical, mental, emotional, and social growth and development—and their care and guidance. In practice, content draws on aspects of the social and biological sciences.

## 09 HOME ECONOMICS (Continued)

### 09.01 03 00 00 Clothing and Textiles

The study of clothing and textiles, including the significance of these to the individual and family, and the nature, acquisition, and uses of textiles and clothing products. Planned experiences in the selection, construction, maintenance, and alteration of clothing and other textile products are usually provided.

### 09.01 04 00 00 Consumer Education

(For definition see 15.05 00 00 00 *Consumer Education* under SOCIAL SCIENCES/SOCIAL STUDIES.) Emphasis in home economics will be on consumer education as it relates to management of a home and to the welfare of family members.

### 09.01 05 00 00 Family Health

The study of related aspects of health in family living with special emphasis on nutrition, emotional health, the relationship of the health of an individual to the well-being of the family, the prevention of illness, and the management and elementary skills involved in caring for the ill and convalescent in the home.

### 09.01 06 00 00 Family Relations

The study of the nature, functions, and significance of human relationships in the family. The subject matter includes concepts and principles related to various family living conditions, the establishment and maintenance of relationships, and the preparation for marriage and family life. These designated aspects of family relationships emphasize the universality of families, the uniqueness of individuals and families, the development and socialization of the individual, and meeting the variety of needs and interests of family members.

### 09.01 07 00 00 Foods and Nutrition

The study of food and its role in personal and family living, including the basic principles of health, food management, and economics. In practice, emphasis is frequently placed on meal management as a means of understanding the significance and nature of food, its care, and its preparation for individuals and families.

### 09.01 08 00 00 Home Management

The study of the complexities and processes involved in formulating goals, making decisions, and effectively using and controlling human and other

resources for establishing and maintaining a home and family. The subject matter provides for a variety of home management considerations, such as the societal and economic influences on individual and family management, values, goals and standards, family economics, and the organization of activities in the home.

### 09.01 09 00 00 Housing and Home Furnishings

The study designed to develop judgment needed for creating a favorable environment for family living. Attention is given to a complex of housing and home furnishing considerations including the influence of housing on people, types and costs of housing, interior design, the care, maintenance, and improvement of homes and furnishings, and the relation of resources to family needs.

### 09.01 99-00 00 Other Homemaking

Include here other organized subject matter emphasized in homemaking which is not listed above. (Specify.)

## 09.02 00 00 00 OCCUPATIONAL PREPARATION

The courses or units of instruction emphasizing the acquisition of competencies needed for getting and holding a job and/or preparing for advancement in an occupational area using home economics knowledge and skills. Instructional content is selected from home economics subject areas to meet the unique requirements in specific occupations and is coordinated with appropriate field, laboratory, and work experience. Occupations include those which provide (1) services to families in the home and similar services to others in group situations, (2) assistance to professional home economists and professionals in fields related to home economics in industries, agencies and organizations; and (3) other services and/or assistance directly related to one or more home economics subject-matter areas. (Included as 16.05 00 00 00 *Home Economics-related Technology* under TECHNICAL EDUCATION.)

### 09.02 01 00 00 Care and Guidance of Children

Preparation for various kinds of employment related to child care centers and young children, e.g., assisting directors of child day-care centers or nursery schools, assisting with activities on playgrounds and in recreation centers, and caring for children in homes and in such public places as stores, playgrounds, recreation centers, and transportation terminals. (Included as 16.05 01 00 00 *Child Care Center Assistant*, 16.05 02 00 00 *Hospital Children's Division Assistant*, and 16.05 03 00 00 *Teacher's*

Assistant at the Preprimary Level under TECHNICAL EDUCATION.)

09.02 02 00 00 Clothing Management, Production, and Services

Preparation for employment concerned with clothing and textiles, e.g., fitting and altering ready-made garments, custom tailoring and dressmaking, laundry-drycleaning work, demonstration work, and technical work in business and industry. (See also 17.33 00 00 00 *Textile Production and Fabrication* under TRADE AND INDUSTRIAL OCCUPATIONS.)

09.02 03 00 00 Food Management, Production, and Services

Preparation for various kinds of employment related to institutional and commercial food services. Employment may include workers and supervisors in hospitals, child day-care centers, homes for the elderly, and school lunch programs, and demonstrators and technicians in food industries. (Included as 16.05 04 00 00 *Food Service Supervisor* under TECHNICAL EDUCATION.) (See also 04.07 00 00 00 *Food Services* under DISTRIBUTIVE EDUCATION, and 17.29 00 00 00 *Quantity Food Occupations* under TRADE AND INDUSTRIAL OCCUPATIONS.)

09.02 04 00 00 Home Furnishings, Equipment, and Services

Preparation for various kinds of employment related to home furnishings and/or equipment. It includes assisting purchasers in the selection of suitable home furnishings and/or equipment, assisting interior decorators, and custom-making of curtains, draperies, slip covers, and similar items. (Included as 16.05 05 00 00 *Interior Decorator Assistant* and 16.05 06 00 00 *Home Equipment Demonstrator* under TECHNICAL EDUCATION) (See also 04.10 00 00 00 *Home Furnishings* under DISTRIBUTIVE EDUCATION.)

09.02 05 00 00 Institutional and Home Management and Supporting Services

Preparation for various kinds of employment related to institutional and home management services. These include homemaker-home health aides, assistants to homemakers, management aides in public housing, institutional housekeeping, executive housekeeping, and hotel and motel housekeeping.

09.02 99 00 00 Other Occupational Preparation

Include here other aspects of occupational preparation not included above. (Specify.)

## INDUSTRIAL ARTS

10.00 00 00 00

Industrial Arts is the body of related subject matter, or related courses, organized for the development of understanding about the technical, consumer, occupational, recreational, organizational, managerial, social, historical, and cultural aspects of industry and technology. Learning experiences involve activities such as experimenting, designing, constructing, evaluating, and using tools, machines, materials, and processes which provide opportunities for creativity and problem solving.

The Ad Hoc Committee for Industrial Arts applied the following rationale to the selection of the items for placement in the Industrial Arts subject-matter area: (1) the items were determined by consensus of the committee to be appropriate to the area; (2) the items could be defined in brief form using only salient descriptive elements, and (3) the various items classified were identifiable by titles which are considered to be most commonly used in current practice in industrial arts.

Opportunities to develop leadership, social and civic awareness, and increased understanding of industry and technology are provided through a student organization such as the Industrial Arts Student Club. As an integral part of the instructional program, students engaged in activities that extend their interests, skills, and knowledge in selected aspects of industrial arts. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. A variety of activities is identified under 20.00 00 00 00 *Cocurricular Activities* in chapter 5 beginning on page 146, they are discussed more fully in this chapter beginning on page 242. The Industrial Arts Student Club is identified for reporting purposes and further described under *Cocurricular Activities* as item 20.01 15 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series-Evaluation and Curriculum Improvement on pages 71-78, and the items classified in the X 32 00. Series-School Services Supporting Instruction on pages 90-96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.



## 10. INDUSTRIAL ARTS—(Continued).

Included in this subject-matter area are the items of information which identify various aspects of industrial arts.

### 10.01 00 00 00 CONSTRUCTION

The study of the technology and the socio-economic contributions of those industries concerned with residential, industrial, and transportation structures. Learning activities, which are usually centered around scaled structures, involve research, design, engineering, masonry, carpentry, electricity, and plumbing.

### 10.02 00 00 00 CRAFTS (INDUSTRIAL)

A category of information and skills concerned with handicrafts and the craft industry, including the tools, materials, processes, products, and occupations of the industry. Subject matter and learning experiences are organized under various descriptive titles such as Art Metals, Ceramics, Crafts (Industrial), Industrial Crafts, Leather, Textiles, and other crafts (industrial).

#### 10.02 01 00 00 Art Metals

The study of metals which are used in the manufacture or fabrication of ornamental products. Learning experiences generally include experimenting, designing, constructing, and evaluating art metal products.

#### 10.02 02 00 00 Ceramics

The study of the tools, materials, and industrial processes involved in the manufacture of products made from non-metallic resources such as rocks, clay, glass, and sand, and the various types and uses of ceramic products. Learning experiences generally include experimenting, designing, constructing, and evaluating ceramic products.

#### 10.02 03 00 00 Crafts (Industrial)

The study of craft industries including the tools and processes used to produce craft products from a wide variety of materials such as ceramics, leather, rocks, fibers, metals, and woods. Learning experiences generally include experimenting, designing, constructing, and evaluating useful products with emphasis on industrial applications.

#### 10.02 04 00 00 Industrial Crafts (See Crafts (Industrial))

#### 10.02 05 00 00 Leather

The study of leather and related materials including the tools and processes used to produce leather products. Learning experiences generally include experimenting, designing, constructing, and evaluating products.

#### 10.02 06 00 00 Textiles

The study of the tools, materials, and processes used in the textile industry including the source, preparation, and applications of fibers. Learning experiences generally include experimenting, designing, weaving, and evaluating products made of a variety of fibers.

#### 10.02 99 00 00 Other Crafts (Industrial)

Include here other organized subject matter and learning situations emphasized in crafts which are not listed above. (Specify.)

### 10.03 00 00 00 DRAFTING

A category of information and skills concerned with conveying ideas or illustrations graphically through drawings, charts, sketches, maps, and graphs, and the related factors such as the role of drafting in history and industry. Subject matter and learning experiences are organized under various descriptive titles such as Architectural Drafting, Descriptive Geometry, Drafting, Drafting Technology, Engineering Drawing, Industrial Design, Mechanical Drawing, Technical Illustration, and other drafting. (See also 17.13 00 00 00 *Drafting Occupations* under TRADE AND INDUSTRIAL OCCUPATIONS.)

#### 10.03 01 00 00 Architectural Drafting

The study of the means of communicating, through lines and symbols, information about buildings. Learning activities include the development of preliminary sketches, plans, elevations, sections, and detail drawings, and the study of architectural design, the history of structures, building ordinances, and building materials.

#### 10.03 02 00 00 Descriptive Geometry

The study of the representation of points, lines, and surfaces by accurate orthographic drawing and the graphical solution of problems according to form and position in space.

#### 10.03 03 00 00 Drafting

The study of the communication of ideas through drawings, sketches, charts, graphs, and maps. Learning experiences include the development of skills

through the use of drafting instruments involved in lettering, sketching, geometric construction, orthographic and pictorial drawings, auxiliaries, sections, and working drawings.

#### 10.03 04 00 00 Drafting Technology

The study of graphic representation with special emphasis on technical requirements, specifications, and standards.

#### 10.03 05 00 00 Engineering Drawing

A study of the communication of ideas through lines, symbols, and drawings depicting the mechanical details associated with machine parts, including machine design. Learning activities involve the use of technical drawing instruments and techniques.

#### 10.03 06 00 00 Industrial Design

The study of industrial products with special consideration being given to (1) esthetics and the appropriate use of industrial materials and processes, and (2) their value to society. Learning activities involve the development of skills and creative abilities in the use of media for conveying ideas graphically. (See also 02.02 03 02 00 *Industrial Product Design* under ART.)

#### 10.03 07 00 00 Mechanical Drawing

A study of the communication of ideas through lines, symbols, and drawings. Learning activities involve the use of technical drawing instruments to convey ideas graphically, e.g., orthographic projection, pictorial views, and assembly drawings.

#### 10.03 08 00 00 Technical Illustration

The study of the techniques of presenting information graphically, including schematics, sections, exploded views, and other techniques which illustrate or clarify verbal or written description.

#### 10.03 99 00 00 Other Drafting

Include here other organized subject matter and learning situations emphasized in drafting which are not listed above. (Specify.)

#### 10.04 00 00 00 ELECTRICITY/ELECTRONICS

A category of information and skill concerned with electrical energy including theory, applications, and control as they relate to electrically powered equipment, to various kinds of communications equipment, and to related factors such as occupations, economics, and consumer information. Subject matter and learning

experiences are organized under various descriptive titles such as Electricity, Electricity/Electronics, Electronics, and other electricity/electronics (See also 17.14 00 00 00 *Electrical Occupations*, and 17.15 00 00 00 *Electronics - Occupations* under TRADE AND INDUSTRIAL OCCUPATIONS.)

#### 10.04 01 00 00 Electricity

The study of sources, and measurement, control, and applications of electrical energy as used for heating, power, and illumination, as well as some elementary aspects of the use of electrical energy for communication as in devices such as the telegraph, telephone, and radio. Learning activities include demonstration of, experimenting with, designing, constructing, and testing electrical devices.

#### 10.04 02 00 00 Electricity/Electronics

The study of sources, measurement, control, and applications of electrical energy in devices such as those used in heating, power, and illumination, as well as those used in communications, e.g., the telegraph, telephone, radio, television, radar, and computers. Learning activities include demonstration of, experimenting with, designing, constructing, and testing electrical devices.

#### 10.04 03 00 00 Electronics

The study of the measurement, control, and applications of electrical energy in devices used for communication such as the telegraph, telephone, radio, television, radar, and computers. Learning activities include demonstration of, experimenting with, designing, constructing, and testing electrical devices.

#### 10.04 99 00 00 Other Electricity/Electronics

Include here other organized subject matter and learning situations primarily related to and emphasized in electrical energy which are not listed above. (Specify.)

#### 10.05 00 00 00 ELEMENTARY SCHOOL INDUSTRIAL ARTS

That phase of the elementary school curriculum which provides the child with opportunities for exploration, manipulation, experimentation, planning, and using tools, materials, and techniques appropriate to converting materials to serve useful purposes. Planned activities and experiences include (1) the construction of projects related to and reinforcing the elementary school subject matter, and (2) an introductory study of industry.

## 10 INDUSTRIAL ARTS (Continued)

### 10.05 01 00 00 Industrial Arts in the Elementary School (Grades or Years K-4)

Basic experiences in industrial arts used to reinforce the instructional program for the grades or years kindergarten through four. Activities include working with tools and materials and are designed to help pupils (1) improve communication skills by means of experience charts, (2) discover concepts of construction of objects using many materials, (3) apply industrial arts experiences to varied aspects of subject matter, (4) discover and explore interests and talents, and (5) develop concepts of preplanning and organizing learning activities.

### 10.05 02 00 00 Intermediate Industrial Arts Program (Grades or Years 5 and 6)

Subject matter and experiences in industrial arts which are planned to utilize maximally pupils' desires to formulate ideas and design and engage in constructional project activities. Instruction emphasizes the development of fundamental tool skills and knowledge in basic industrial arts and is designed to relate to and supplement learning in the various subject-matter areas.

### 10.05 09 00 00 Other Elementary School Industrial Arts

Include here other organized subject matter and experiences emphasized in elementary school industrial arts which are not listed above. (Specify.)

### 10.06 00 00 00 GENERAL INDUSTRIAL ARTS (FORMERLY GENERAL SHOP)

The study of two or more separate and somewhat distinct aspects of industry and technology. Learning experiences involve activities such as experimenting, designing, constructing, evaluating, and using a variety of tools, materials, and processes.

### 10.07 00 00 00 GRAPHIC ARTS

The study of information and skills concerned with graphic reproduction, as well as related factors such as occupations, economics, and consumer information. Subject matter and learning experiences are organized under various descriptive titles such as Graphic Arts, Photography, Photolithography (Photo-offset-lithography or offset), Printing, and other graphic arts.

#### 10.07 01 00 00 Graphic Arts

The study of tools, materials, and processes of the printing industry including block printing, intaglio

printing, letterpress printing, lithography, photography, rubberstamp construction, silk screen printing, thermography, type composition, and binding. Learning experiences include designing, composing, printing, and evaluating reproduction techniques, and the study of history, economics, occupations, and consumer information related to the printing industry

#### 10.07 02 00 00 Photography

The study of the tools, materials, and processes used in photography with emphasis on industrial uses. Learning activities include experiences using cameras, developing negatives, and making contact prints, enlargements, and mountings.

#### 10.07 03 00 00 Photolithography (Photo-offset-lithography or Offset)

The study of the technology or graphic reproduction from a flat surface or plate prepared photo-mechanically. Learning experiences include design, hot and/or cold composition, pasteup, camera and dark-room techniques, platemaking, and offset presswork.

#### 10.07 04 00 00 Printing

The study of the industry and technology involved in graphic reproduction from an inked surface—relief, intaglio, or flat. Activities include design, composition, imposition, presswork, and bindery.

#### 10.07 99 00 00 Other Graphic Arts

Include here other organized subject matter and learning situations emphasized in graphic arts which are not listed above. (Specify.)

### 10.08 00 00 00 HOME MECHANICS

The study of the tools, materials, and processes involved in the upkeep and repair of the home, its equipment, and devices. Learning activities are centered around typical problems encountered by the homeowner and include simple maintenance, repairs, and construction.

### 10.09 00 00 00 INDUSTRIAL ARTS MATHEMATICS

(For definition see 11.05 03 00 00 *Shop Mathematics* under MATHEMATICS.)

### 10.10 00 00 00 INDUSTRIAL ARTS SCIENCE (APPLIED CHEMISTRY)

A body of selected subject matter which is sometimes referred to as Practical or Industrial Chemistry. The subject matter is introductory in nature and is

designed primarily for nonscience-oriented pupils in vocational and technical instructional programs. It is usually descriptive, less quantitative, and less theoretical than other chemistry courses. The topics are usually selected for applications in industry and technology. (See also Major Aspects of the Physical Sciences, 13.03 00 00 00 *Physical Sciences*, under NATURAL SCIENCES.)

#### 10.11 00 00 00 INDUSTRIAL ARTS SCIENCE (APPLIED PHYSICS)

A technologically or industrially oriented physics course in which the subject matter is less quantitative and theoretical than regular secondary school physics. Although laboratory exercises are an important part of the course they are usually more of the "follow-the-direction" type having practical applications. Applied physics is sometimes offered in junior college, technical and vocational education instructional programs. (See also Major Aspects of the Physical Sciences, 13.03 00 00 00 *Physical Sciences*, under NATURAL SCIENCES.)

#### 10.12 00 00 00 INDUSTRIAL MATERIALS AND PROCESSES

A category of information and skills concerned with industrial-technical materials and processes including their properties and utilization as they are fabricated into usable products. Subject matter and learning experiences are organized under various descriptive titles such as Fluid Power, Industrial Materials, Industrial Materials and Processes, Industrial Processes, Instrumentation, Numerical Control, and other industrial materials and processes.

##### 10.12 01 00 00 Fluid Power

The study of hydraulics and pneumatics, including power conversion, transmission, and utilization in both stationary and mobile installations.

##### 10.12 02 00 00 Industrial Materials

The study analysis and testing of industrial materials, e.g., metals, hydrocarbons, wood, finishes, plastics, and earth materials, chemical composition, physical and mechanical properties, fabrication limitations, and performance when exposed to a normal industrial and commercial environment.

##### 10.12 03 00 00 Industrial Materials and Processes

The study of the properties and utilization of industrial materials as they are fabricated into usable products, including a study of the utilization and

control of the power necessary to efficiently process materials.

##### 10.12 04 00 00 Industrial Processes

The study of the methods whereby industrial materials are fabricated by hand, machine, and automated equipment to produce usable products.

##### 10.12 05 00 00 Instrumentation

The study of devices necessary to observe and control both manufacturing processes and the performance of mechanical and electrical machinery, including the science of measurement as well as the conversion and recording of physical, chemical, and mechanical state and condition into sensible information.

##### 10.12 06 00 00 Numerical Control

The study of industrial automation in which specific commands to perform desired machine tool operations are supplied to the machine control mechanisms by means of information previously programmed by punched card, punched tape, or magnetic tape.

##### 10.12 99 00 00 Other Industrial Materials and Processes

Include here other organized subject matter and learning situations primarily related to and emphasized in industrial materials and processes which are not listed above. (Specify.)

#### 10.13 00 00 00 MANUFACTURING

The study of the technology and the socioeconomic contributions of industries concerned with the creation of durable consumer products. Learning experiences are developed around functions or concepts of industry and include research and experimentation, product design and development, fabrication (custom and mass), packaging, and distribution.

#### 10.14 00 00 00 METALS

A category of information and skills concerned with metals including the products manufactured from metals, the technology employed in the production, processing, and use of metals; and related factors such as occupations, economics, and consumer information. Subject matter and learning experiences are organized under various descriptive titles such as Metals, Metal Machining (Metal Shop), Metal Technology, Sheet Metal, Welding, and other metals.

##### 10.14 01 00 00 Metals

## 10 INDUSTRIAL ARTS--(Continued)

The study of the tools, materials, and processes used in several facets of the metals industries. Learning experiences generally include experimenting, designing, fabricating, forming, and evaluating metals and metal products.

### 10.14 02 00 00 Metal Machining (Metal Shop)

The study of the operations and related information concerned with the shaping of metals by machine.

### 10.14 03 00 00 Metal Technology

The study of the problems and operations involved in the transformation of metal into usable products with special emphasis on technical information, qualities, specifications, and standards. Learning experiences include experimenting, creating, designing, constructing, and evaluating metal products.

### 10.14 04 00 00 Sheet Metal

The study of the operations, problems, and related information concerned with forming and fabricating sheet metal products.

### 10.14 05 00 00 Welding

The study of the operations used in cutting and fabricating metal products by welding techniques.

### 10.14 99 00 00 Other Metals

Include here other organized subject matter and learning situations primarily related to and emphasized in metals which are not listed above. (Specify.)

## 10.15 00 00 00 PLASTICS

A category of information and skills concerned with the production, processing, and uses of plastics, and related factors such as occupations, economics, and consumer information. Subject matter and learning experiences are organized under various descriptive titles such as Plastics, Plastics Technology, and other plastics.

### 10.15 01 00 00 Plastics

The study of the tools, materials, and processes used in several facets of the plastics industry. Learning experiences include experimenting, designing, machining, fabricating, forming, and evaluating plastics and plastic products.

### 10.15 02 00 00 Plastics Technology

The study of the problems and operations involved in the manufacture and transformation of plastics into usable products with special emphasis on technical information, qualities, specifications, and standards. Learning experiences include experimenting, creating, designing, fabricating, forming, and evaluating plastic products.

### 10.15 99 00 00 Other Plastics

Include here other organized subject matter and learning situations primarily related to and emphasized in plastics which are not listed above. (Specify.)

## 10.16 00 00 00 POWER/AUTOMOTIVE MECHANICS

A category of information and skills concerned with the various forms of power, including its generation, transmission, and utilization. Subject matter and learning experiences are organized under various descriptive titles such as Automotive Mechanics, Power and Automotive Mechanics, Transportation, and other power and automotive mechanics. (See also 16.01 04 00 00 *Automotive Technology* under TECHNICAL EDUCATION, and 17.03 00 00 00 *Automotive Services* under TRADE AND INDUSTRIAL OCCUPATIONS.)

### 10.16 01 00 00 Automotive Mechanics

The study of the operating principles, design, construction, maintenance, and repair of automobiles and similar power sources, including developing understanding of related physical and chemical principles.

### 10.16 02 00 00 Power/Automotive Mechanics

The study of the technology involved in harnessing and controlling power, including its source, generation, transmission, and utilization, with specific emphasis on the automobile as a device of power conversion, transmission, and utilization.

### 10.16 03 00 00 Power Mechanics

The study of the development, transmission, and utilization of power, including the theory, maintenance, and servicing of machines and devices for the conversion of power into useful forms. Methods and devices for the transmission of power and output machinery for utilizing power are emphasized.

### 10.16 04 00 00 Transportation

The study of operating principles, design, construction, maintenance, and repair of transportation devices, e.g., automobiles, airplanes, trains, and boats,

including an understanding of related physical and chemical principles.

**10.16 99 00 00 Other Power/Automotive Mechanics**  
Include here other organized subject matter and learning situations primarily related to and emphasized in power and automotive mechanics which are not listed above. (Specify.)

**10.17 00 00 00 RESEARCH AND DEVELOPMENT**  
The study of industrial-technical problems, including provisions for individual or group investigations of problems and opportunities to evaluate their solutions by designing, constructing, and testing projects.

**10.18 00 00 00 SERVICE INDUSTRIES**  
The study of the technology of industries concerned with the maintenance and repair of consumer and/or industrial products. Learning experiences involve diagnosing, adjusting, replacing, rebuilding, installing, testing, or refinishing these products. Usually, the problems of small service business management and human relations are included for study.

**10.19 00 00 00 WOODS**  
A category of information and skills concerned with woods, including various manufactured wood products, the technology employed in the manufacture and construction of products using woods, and related factors such as occupations, economics, and consumer information. Subject matter and learning experiences are organized under various descriptive titles such as Woods, Woods Technology, and other woods.

**10.19 01 00 00 Woods**  
The study of the tools, materials, and processes used in the woods industries. Learning experiences usually include experimenting with, designing, and constructing wood products, and evaluating woods and wood products, using the tools, materials, and processes related to these industries. The study of such factors as techniques, economics, and consumer information relating to these industries is emphasized.

**10.19 02 00 00 Woods Technology**  
A study of the woods manufacturing industries and the technology involved in the construction of buildings and the manufacture of articles made from wood and wood products. Learning experiences include experimenting with, designing, constructing, operating, and evaluating industrial tools, processes, forest products, and related synthetic materials.

**10.19 99 00 00 Other Woods**  
Include here other organized subject matter and learning situations primarily related to and emphasized in woods which are not listed above. (Specify.)

**10.99 00 00 00 OTHER INDUSTRIAL ARTS**  
Include here other organized subject matter and learning situations emphasized in industrial arts which are not listed or classifiable in one of the above major categories. (Specify.)

## MATHEMATICS

### 11.00 00 00 00

Mathematics comprises the body of related subject matter, or the body of related courses, organized for carrying on learning experiences concerned with the science of relations existing between quantities (magnitude) and operations and the science of methods used for deducing from other quantities, known or supposed, the quantities sought.

The Ad Hoc Committee for Mathematics applied the following rationale to the selection of the items for placement in the Mathematics area: (1) the items selected and classified were determined by consensus of the committee to include the aspects of mathematics most commonly taught in the United States; (2) the various aspects of subject matter selected for classification could be defined in brief form using only salient, descriptive elements; and (3) the items were identifiable by titles which were considered to be most commonly used in current practice in mathematics.

Opportunities are frequently provided both during and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of mathematics as an integral part of the instructional program. As an example, the Mathematics Club provides additional opportunities to explore interests, apply various acquired skills, and increase knowledge about different aspects of mathematics. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. A variety of activities is identified under 20.00 00-00 00 Cocurricular Activities in chapter 5 beginning on page 146; and they are described more fully in this chapter beginning on page 242. As an illustration, the Mathematics Club is identified for reporting purposes under Cocurricular Activities as Item 20.01 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples, see

## 11 MATHEMATICS--(Continued)

the items classified in the X 07 00. Series--Evaluation and Curriculum Improvement on pages 71-78, and the items classified in the X 32 00. Series--School Services Supporting Instruction on pages 90-96. Graphic illustrations on these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included in this subject-matter area are the items of information which identify various subjects in the mathematics area.

### 11.01 00 00 00 ELEMENTARY - SCHOOL MATHEMATICS (K-6)

Mathematics subject matter, designed for the elementary school, which usually is concerned with the study of various aspects of arithmetic, informal algebra, and informal geometry. An overall goal is understanding accompanied by reasonable efficiency in both the computational and applicational phases of mathematics. Toward this end certain emphases permeate all topics and all grade levels. Among these are (1) the use of manipulative and pictured materials to clarify ideas and to build meanings; (2) recognition of the role of mathematics in real life and its use in problem solving situations; (3) the rationale of the decimal numeration system and of the algorithms of the operations; (4) the relationships which exist within a single operation, between two operations, and among the four operations; (5) the continuous development of the concepts which are basic to any topic studied, from the simplest beginnings to whatever extensions and expansions are consistent with the learner's ability to comprehend; (6) provision for prerequisite learnings for later topics; (7) the use of methods which will interest, stimulate, and motivate the pupil; and (8) appropriate adjustments for variations in the abilities of pupils.

In practice, the subject matter usually is organized on a spiral plan. By means of this plan pupils study the same subject-matter topic two or more years or grade-placement levels, each time at a higher level of difficulty. Generally included in the K-6 mathematics program are the following topics. (indicate the topics emphasized.)

11.01 00 01 00

Sets, number, numerals

11.01 00 02 00

Cardinal number, ordinal number

11.01 00 03 00

Place value as related to numeration systems with emphasis on the decimal system

11.01 00 04 00

Number systems, whole numbers, integers, and rationals

11.01 00 05 00

Basic operations, addition, subtraction, multiplication, division, and factoring (e.g., halving)

11.01 00 06 00

Variables: frames, letters, and other symbols

11.01 00 07 00

Properties of operations on whole numbers, integers, and rationals

11.01 00 08 00

The rationale of computation, algorithms involving whole and rational numbers.

11.01 00 09 00

Ratio: proportion, percent

11.01 00 10 00

Prime and composite numbers, factors and multiples

11.01 00 11 00

Order relations, equality and inequality

11.01 00 12 00

The number line

11.01 00 13 00

Measurement, e.g., units of measurement, nature of measurement, length, area, perimeter, and volume.

11.01 00 14 00

Informal geometry, e.g., form and pattern as observed in the physical world, intuitive development of such concepts as geometrical point, line, line segment, ray, angle, simple closed curve, plane, polygons, and space figures

11.01 00 15 00

Informal algebra: number sentences, formulas, graphing, and a number line

11.01 00 99 00 Other Elementary-School Mathematics Topics

Include here other topics emphasized in elementary-school mathematics which are not listed above. (Specify.)

11.02 00 00 00 MATHEMATICS (7TH AND 8TH GRADES)

Mathematics subject matter designed for the junior high school and concerned with extending the various aspects of arithmetic, algebra, and informal geometry taught in the elementary school. There are also more advanced topics introduced on an informal basis. Emphasis is on (a) expanding the topics studied in the elementary school and introducing advanced topics consistent with the learners' ability to comprehend, (b) the application of mathematics, (c) methods of problem solving, and (d) metric and nonmetric geometry.

11.02 01 00 00 Arithmetic

The following topics in arithmetic are usually included in mathematics for grade 7 and 8. (Indicate the topics emphasized.)

11.02 01 01 00

System of numeration in base ten, possibly contrasting it with other bases

11.02 01 02 00

Rationale of the computational processes

11.02 01 03 00

Nature and properties of the systems of numbers, e.g. natural numbers, whole numbers, integers, rational numbers, and real numbers

11.02 01 04 00

Representation of numbers by terminating and nonterminating decimal fractions

11.02 01 05 00

Very large and very small numbers, scientific notation, approximation, and precision

11.02 01 06 00

Ratios, proportions, and percents

11.02 01 99 00 Other Arithmetic Topics

Include here other topics emphasized in arithmetic for grades 7 and 8 which are not listed above. (Specify.)

11.02 02 00 00 Geometry

The following topics in geometry are usually included in mathematics for grades 7 and 8. (Indicate the topics emphasized.)

11.02 02 01 00

Lines, angles, triangles, polygons, circles, and solids; calculation of perimeters, areas, and volumes of polygons, circles, and solids

11.02 02 02 00

Measurements, e.g., length, area, angles, volume, and weight, including metric measurement

11.02 02 03 00

Similarity and congruence of polygons

11.02 02 04 00

Parallelism and perpendicularity

11.02 02 05 00

Uses of various instruments, including the straightedge, protractor, and compass for constructing geometric figures

11.02 02 06 00

Construction of geometric models

11.02 02 07 00

Nonmetric geometry

11.02 02 99 00 Other Geometry Topics

Include here other topics emphasized in geometry for grades 7 and 8 which may be identified in the list under 11.02 00 00 00 *Geometry*. Also, include topics emphasized that do not appear in the list above or under *Geometry*. (Specify.)

11.02 03 00 00 Algebra and Statistics

The following topics in algebra and statistics are usually included in mathematics for grades 7 and 8. (Indicate the topics emphasized.)

11.02 03 01 00

Reading and constructing statistical graphs

11.02 03 02 00

Representing numbers by symbols

11.02 03 03 00

Operations with symbols



## 11 MATHEMATICS--(Continued)

11.02 03 04 00

Formulas, including those used in measurement and percentage

11.02 03 05 00

Integers, rationals, and real numbers

11.02 03 06 00

Graphs on number line and number plane; of simple equalities and inequalities

11.02 03 99 00 Other Algebra and Statistics Topics

Include here other topics emphasized in algebra and statistics for grades 7 and 8 which may be identified in the list under 11.03 00 00 00 *Algebra* and/or 11.15 00 00 00 *Probability and Statistics*. Also, include topics emphasized that do not appear in the list above or under *Algebra* or *Probability and Statistics*. (Specify.)

### 11.03 00 00 00 ALGEBRA

An organization of mathematics subject matter concerned (through high school) primarily with the properties of number systems, i.e., the real number system and the complex number system. Although the content of high school algebra has been expanded in the direction of structure (including proof), manipulative skills are emphasized. In some high school courses topics such as groups, rings, and integral domains as well as work on the various kinds of fields have also been introduced. Topics selected from the following list (11.03 00 01 00 through 11.03 00 99 00), as well as topics not listed below, may serve to describe the instructional content of algebra—first-year, second-year, third-year, and other algebra.

11.03 01 00 00 First-year

(For a description of the subject matter select from the topics which follow.)

11.03 02 00 00 Second-year

(For a description of the subject matter select from the topics which follow.)

11.03 03 00 00 Third-year

(For a description of the subject matter select from the topics which follow.)

11.03 00 01 00

Symbols and their referents (numerals and numbers)

11.03 00 02 00

Variables

11.03 00 03 00

Sentence forms (open sentences) and statements

11.03 00 04 00

Numerical expressions and algebraic expressions

11.03 00 05 00

Symbols for grouping and conventions for omitting them

11.03 00 06 00

Principal operators, indicated sums and products; polynomials

11.03 00 07 00

Introduction to the real numbers (directed numbers)

11.03 00 08 00

Addition and multiplication of reals

11.03 00 09 00

Additive inverses (opposites) and multiplicative inverses, (reciprocals)

11.03 00 10 00

Inverse operations (subtraction and division of reals)

11.03 00 11 00

Evaluating algebraic expressions

11.03 00 12 00

Field properties of the real number system

11.03 00 13 00

Order and the real numbers, the number line

11.03 00 14 00

Absolute value and distance on the number line

11.03 00 15 00

Graphs on the number line: simple equations and inequalities in one variable

11.03 00 16 00

Open sentences and their solution

|                |                                                                                     |                |                                                                     |
|----------------|-------------------------------------------------------------------------------------|----------------|---------------------------------------------------------------------|
| 11.03 00 17 00 | The real number system as an ordered field                                          | 11.03 00 32 00 | Linear functions                                                    |
| 11.03 00 18 00 | Deductive organization, postulates, proof                                           | 11.03 00 33 00 | Quadratic functions                                                 |
| 11.03 00 19 00 | Equivalent expressions, simplifying, expanding, and factoring                       | 11.03 00 34 00 | Variation                                                           |
| 11.03 00 20 00 | Equivalent expressions and equivalent inequalities                                  | 11.03 00 35 00 | The positive integers                                               |
| 11.03 00 21 00 | Equivalent expressions containing fractions                                         | 11.03 00 36 00 | The integers                                                        |
| 11.03 00 22 00 | Equations containing fractions; ratio, proportion                                   | 11.03 00 37 00 | Mathematical induction                                              |
| 11.03 00 23 00 | Sets and set notation; subsets, intersection, union                                 | 11.03 00 38 00 | The rationals                                                       |
| 11.03 00 24 00 | Sets of ordered pairs; Cartesian products; relations; functions                     | 11.03 00 39 00 | Positive integral exponents                                         |
| 11.03 00 25 00 | The number plane lattice (of integers)                                              | 11.03 00 40 00 | Integral exponents                                                  |
| 11.03 00 26 00 | The number plane                                                                    | 11.03 00 41 00 | Word problems                                                       |
| 11.03 00 27 00 | Graphs on the number plane and the number plane lattice: equations and inequalities | 11.03 00 42 00 | Systems of equations (3 and 4 variables)                            |
| 11.03 00 28 00 | Simultaneous (systems of) equations and inequalities                                | 11.03 00 43 00 | Upper and lower bounds                                              |
| 11.03 00 29 00 | Quadratic equations and inequalities                                                | 11.03 00 44 00 | Least upper bound and greatest lower bound                          |
| 11.03 00 30 00 | Discriminant of a quadratic                                                         | 11.03 00 45 00 | Well-ordering principle                                             |
| 11.03 00 31 00 | Constant functions                                                                  | 11.03 00 46 00 | Completeness and the real number system as a complete ordered field |
|                |                                                                                     | 11.03 00 47 00 | Radicals                                                            |
|                |                                                                                     | 11.03 00 48 00 | Square root and decimal approximations                              |

# 11 MATHEMATICS- (Continued)

- 11.03 00 49 00  
Rational exponents
- 11.03 00 50 00  
Equations involving radicals
- 11.03 00 51 00  
Formulas
- 11.03 00 52 00  
Scientific notation
- 11.03 00 53 00  
Sequences
- 11.03 00 54 00  
Continued sums and  $\Sigma$ -notation
- 11.03 00 55 00  
Continued products and  $\pi$ -notation
- 11.03 00 56 00  
Difference sequences
- 11.03 00 57 00  
Arithmetic sequences (progressions)
- 11.03 00 58 00  
Geometric sequences (progressions)
- 11.03 00 59 00  
Combinations
- 11.03 00 60 00  
Permutations
- 11.03 00 61 00  
Probability
- 11.03 00 62 00  
Binomial Theorem for positive integral
- 11.03 00 63 00  
Extended Binomial Theorem
- 11.03 00 64 00  
Factor theorem
- 11.03 00 65 00  
Remainder theorem
- 11.03 00 66 00  
Synthetic division
- 11.03 00 67 00  
Determinants
- 11.03 00 68 00  
Matrices
- 11.03 00 69 00  
Vectors
- 11.03 00 70 00  
Limits
- 11.03 00 71 00  
Continuous functions
- 11.03 00 72 00  
Complex numbers
- 11.03 00 73 00 Other Topics in Algebra  
Include here other topics emphasized in algebra which are not listed above. (Specify.)
- 11.03 04 00 00 College Algebra  
(The subject matter is the same as or similar to
- 11.03 03 00 00 *Algebra-Third year* and/or
- 11.09 00 00 00 *Elementary Functions.*)
- 11.03 05 00 00 Intermediate Algebra  
(The subject matter is the same or similar to
- 11.03 02 00 00 *Algebra-Second-year.*)
- 11.03 06 00 00 Linear Algebra  
The study of the linear operations of vector addition and multiplication by scalars, and of transformations which preserve these operations. The multi-variable aspect of linear algebra is one of its extensions of ordinary algebra. Topics such as the following are usually included: simultaneous linear equations, vectors, linear dependence, bases, dimension, geometry of lines and planes in spaces of any dimension, convexity, inner products, orthogonal bases, linear transformations and their representation as matrices, matrix algebra, determinants, eigenvalues, eigenvectors, and conical forms; the standard forms of conics and other applications.
- 11.03 99 00 00 Other Algebra  
Include here other organized subject matter emphasized in algebra which is not listed above. (Specify.)

## 11.04 00 00 00 ALGEBRA AND TRIGONOMETRY (INTEGRATED)

An organization of subject matter frequently provided for a third or fourth year of study in a sequence of mathematics offerings. The subject matter usually is selected and organized to prepare pupils, having competency in mathematics, for the study of calculus and analytic geometry in a college or other posthigh school instructional program requiring proficiency in mathematics. The subject matter is essentially college level in nature, and usually includes topics in algebra and trigonometry such as the following:

### 11.04 00 01 00

Elementary functions and graphs: linear and quadratic functions, exponential and logarithmic functions, and others

### 11.04 00 02 00

Mathematical induction

### 11.04 00 03 00

Polynomials, remainder theorem, factor theorem, synthetic theorem, and others

### 11.04 00 04 00

Complex numbers

### 11.04 00 05 00

Circular functions, solution of triangles, trigonometric functions and their graphs, analytic trigonometry, identities and equations, and others

### 11.04 00 99 00 Other Topics in Algebra and Trigonometry (integrated)

Include here other topics emphasized in algebra and trigonometry (integrated) which are not listed above. (Specify.)

## 11.05 00 00 00 APPLIED MATHEMATICS

Mathematics courses designed and provided for study as alternatives to the sequentially organized college-preparatory or general educational mathematics courses. Subject matter usually is comprised of selected aspects of mathematics used in practical and specialized situations in daily life. The subject matter is treated under various descriptive titles, such as: Business Arithmetic, Consumer Mathematics, Shop Mathematics, and other applied mathematics.

### 11.05 01 00 00 Business Arithmetic

The study of various aspects of arithmetic

which apply particularly to business problems. Usually included in the mathematics subject matter for business applications are (1) the rationale of computation by means of the four basic operations with the rational numbers; (2) the decimal numeration system; (3) ratio, proportion, and percent; (4) measurement; (5) formulas; and (6) graphs. (Included as 03.05 00 00 00 *Business Arithmetic or Mathematics* under BUSINESS.)

### 11.05 02 00 00 Consumer Mathematics

The study of various applications of arithmetic, informal algebra, and informal geometry which apply particularly to consumer problems. Usually included in the mathematics subject matter for consumer applications are (1) the rationale of computation by means of the four basic operations with real numbers; (2) ratio, proportion, and percent; (3) linear, area, volume, and angular measurement; (4) graphs and descriptive statistics; and (5) simple equations and formulas.

### 11.05 03 00 00 Shop Mathematics

The study of various applications of arithmetic, informal algebra, and informal geometry which apply particularly to shop problems. Usually, the mathematics subject matter for shop applications includes (1) the rationale of computation by means of the four basic operations with real numbers; (2) linear, area, volume, and angular measurement; (3) the decimal numeration system; (4) informal algebra; (5) informal geometry; (6) numerical trigonometry; and (7) mathematical tables, graphs, and the slide rule. (Included as 10.09 00 00 00 *Industrial Arts Mathematics* under INDUSTRIAL ARTS.)

### 11.05 99 00 00 Other Applied Mathematics

Include here other organized subject matter emphasized in applied mathematics which is not classified above. (Specify.)

## 11.06 00 00 00 CALCULUS

The study of two fundamental limits, called the derivative and the integral, and their evaluation by means of a function algebra called "the calculus." Usually, three to four semesters are required to cover the following topics in calculus. Topics selected from the following (11.06 00 01 00 through 11.06 00 99 00), as well as topics not listed below, may be used to describe the instructional subject matter of first-year and second-year calculus.

### 11.06 01 00 00 First-year Calculus

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## 11 MATHEMATICS--(Continued)

(For a description of the subject matter select from the topics which follow.)

- 11.06 02 00 00 Second-year Calculus  
(For a description of the subject matter select from the topics which follow.)
- 11.06 00 01 00  
Functions and limits, continuity
- 11.06 00 02 00  
Derivatives and applications
- 11.06 00 03 00  
Differentiation of polynomials, of algebraic, logarithmic, exponential, and trigonometric functions
- 11.06 00 04 00  
Maxima and minima
- 11.06 00 05 00  
Rate problems, motion in a curve, velocity, and acceleration
- 11.06 00 06 00  
The definite integral and application to areas, volumes, distributions averages, and moments
- 11.06 00 07 00  
The fundamental theorem and techniques of integration
- 11.06 00 08 00  
Numerical calculus
- 11.06 00 09 00  
Theorem of the mean and extension to Taylor's Theorem
- 11.06 00 10 00  
Indefinite sequences, series, indeterminate forms, improper integrals, and other special limits
- 11.06 00 11 00  
Multivariate calculus, including partial differentiation, the differential, and multiple integrals
- 11.06 00 12 00  
Vector calculus gradients, directional derivative, vector products, vector fields, divergence, and curl

11.06 00 13 00

Differential equations and applications

11.06 00 99 00 Other Topics in Calculus

Include here other topics emphasized in calculus which are not listed above. (Specify.)

### 11.07 00 00 00 CALCULUS WITH ANALYTIC GEOMETRY

Usually, the study of intermediate algebra, trigonometry, and elementary functions as prerequisite to the study of calculus with analytic geometry followed by calculus. Calculus topics are the same as those for the standard calculus course, but the analytic geometry is usually reduced to a minimum. Analytic geometry topics frequently include the following: a brief introduction to coordinate geometry, properties of the real number line with emphasis on inequalities and absolute value, neighborhoods and other intervals in the line, slopes and lines, curves, functions and limits, conics, parametric representations of curves, polar coordinates, and rudiments of solid analytic geometry of curves and surfaces.

### 11.08 00 00 00 COMPUTER MATHEMATICS

Mathematics subject matter designed for study by pupils who plan to work closely with computers. Consideration is given to the algorithmic approach to mathematics which enables a problem to be handled by a machine. A first course may include the following topics: (See also 03.17 3 00 00 *Computer-oriented Mathematics (Data-processing Mathematics)* under BUSINESS.)

11.08 00 01 00

Description of the logical structure of the computer operations (not the machine)

11.08 00 02 00

Algorithms for the computer

11.08 00 03 00

Programming languages (fortran or Algol or others)

11.08 00 04 00

Compilers

11.08 00 05 00

Problem solving in numerical and non-numerical situations

11.08 00 99 00 Other Topics in Computer Mathematics  
Include here other topics emphasized in computer mathematics which are not listed above. (Specify.)

**11.09 00 00 00 ELEMENTARY FUNCTIONS**

A body of subject matter in the calculus-preparatory sequence which is designed to bridge the gap from *Intermediate Algebra* to *Calculus with Analytic Geometry*--alternative to and overlapping *College Algebra*. The subject matter is concerned with the study of the elementary functions, their graphs and applications. Usually, the following topics are included for study.

11.09 00 01 00  
Polynomials

11.09 00 02 00  
Rational and algebraic functions

11.09 00 03 00  
Exponential functions

11.09 00 04 00  
Logarithmic functions

11.09 00 05 00  
Trigonometric function, as periodic functions on the real number line

11.09 00 06 00  
Introduction to three-dimensional analytic geometry

11.09 00 99 00 Other Topics in Elementary Functions  
Include here other topics emphasized in elementary functions which are not listed above. (Specify.)

**11.10 00 00 00 FIRST-YEAR COLLEGE MATHEMATICS FOR ELEMENTARY SCHOOL TEACHERS**

The study of mathematics subject matter which usually includes the following topics:

11.10 00 01 00  
Field axioms as they are used in arithmetic

11.10 00 02 00  
Logic and its place in mathematical proof

11.10 00 03 00  
Numeration systems and the meaning of place value

11.10 00 04 00  
Use of sets and the number line in explaining the meaning of number operations

11.10 00 99 00 Other Topics in First-year College Mathematics for Elementary School Teachers

Include here other topics emphasized in first-year college mathematics for elementary school teachers which are not listed above. (Specify.)

**11.11 00 00 00 GENERAL MATHEMATICS**

An organized body of mathematics subject matter which frequently comprises an alternative to the sequence of college-preparatory mathematics courses. In practice, a first course in general mathematics is frequently offered in the 9th grade followed by additional courses in the 10th, 11th, and/or 12th grades. The subject matter for each course in general mathematics may be identified from among the topics listed below:

11.11 01 00 00 First-year General Mathematics  
(For description of the subject matter select from the following topics.)

11.11 01 01 00 Arithmetic  
The following topics in arithmetic are frequently included in general mathematics:

11.11 01 01 01  
Basic concepts and skills, including notation and numeration systems and systems of natural, whole, rational and real numbers

11.11 01 01 02  
Applications of percent and fundamental operations, e.g., interest, borrowing and lending money, discount, taxes, commissions, insurance, social security, and installment buying

11.11 01 01 03  
Elementary number theory: primes, factors, and composites

11.11 01 01 99 Other Arithmetic Topics in First-year General Mathematics  
Include here other topics in arithmetic

# 17 MATHEMATICS--(Continued)

emphasized in the first year of general mathematics which may be identified in the list of arithmetic topics under 11.02 00 00 00, *Mathematics (7th and 8th grades)*, or which are not listed above or under *Mathematics (7th and 8th grades)* (Specify.)

## 11.11 01 02 00 Geometry

Topics in geometry studied in general mathematics frequently include:

### 11.11 01 02 01

Measurement such as angular, area, length, and volume

### 11.11 01 02 02

Use of instruments such as the straight-edge, compass, and protractor for construction of geometric figures

### 11.11 01 02 03

Calculation of perimeter, area, and volume

### 11.11 01 02 04

Construction of models: two-dimensional, three-dimensional

### 11.11 01 02 05

Indirect measurement including scale drawing, similar triangles, and numerical trigonometry

### 11.11 01 02 06

The Pythagorean rule and its application

### 11.11 01 02 99 *Other Geometry Topics in First-year General Mathematics*

Include here other topics in geometry emphasized in the first year of general mathematics which may be identified in the list of topics under 11.12 00 00 00 *Geometry* or in the list of geometry topics under 11.02 00 00 00 *Mathematics (7th and 8th grades)*, or which are not included in either of these lists or above. (Specify.)

## 11.11 01 03 00 Algebra and Statistics

Topics in algebra and statistics studied in general mathematics frequently include:

### 11.11 01 03 01

Introduction to algebra, including

symbols, formulas, positive and negative numbers, equations, and inequalities

### 11.11 01 03 02

Ratio and proportions, trigonometry of the right triangle

### 11.11 01 03 03

Calculation of mean, median, and mode

### 11.11 01 03 04

Statistical graphs

### 11.11 01 03 05

Informal numerical probability

### 11.11 01 03 99 *Other Algebra and Statistics Topics in First-year General Mathematics*

Include here other topics in algebra and statistics emphasized in the first year of general mathematics which may be identified in the list under 11.03 00 00 00 *Algebra* or under 11.15 00 00 00 *Probability and Statistics* or under 11.02 00 00 00 *Mathematics (7th and 8th grades)*, or which are not included in these lists or above. (Specify.)

## 11.11 02 00 00 Second-year General Mathematics

(For description of the subject matter select from the following topics.)

### 11.11 02 01 00 Arithmetic

The following topics in arithmetic are frequently included in general mathematics:

#### 11.11 02 01 01

Basic concepts and skills, including notation and numeration systems and systems of natural, whole, rational, and real numbers

#### 11.11 02 01 02

Applications of percentage and fundamental operations, eg., interest, borrowing and lending money, discount, taxes, commissions, insurance, social security, and installment buying

#### 11.11 02 01 03

Elementary number theory: primes, factors, and composites

### 11.11 02 01 99 *Other Arithmetic Topics in Second-year General Mathematics*

Include here other topics in arithmetic

emphasized in the second year of general mathematics which may be identified in the list of arithmetic topics under 11.02 00 00 00 *Mathematics (7th and 8th grades)*, or which are not listed above or under *Mathematics (7th and 8th grades)*. (Specify.)

11.11 02 02 00 Geometry

Topics in geometry studied in general mathematics frequently include:

11.11 02 02 01

Measurement such as angular, area, length, and volume

11.11 02 02 02

Use of instruments such as the straight-edge, compass, and protractor for construction of geometric figures

11.11 02 02 03

Calculation of perimeter, area, and volume

11.11 02 02 04

Construction of models: two-dimensional, three-dimensional

11.11 02 02 05

Indirect measurement including scale drawing, similar triangles, and numerical trigonometry

11.11 02 02 06

The Pythagorean rule and its application

11.11 02 02 99 *Other Geometry Topics in Second-year General Mathematics*

Include here other topics in geometry emphasized in the second year of general mathematics which may be identified in the list of topics under 11.12 00 00 00 *Geometry* or in the list of geometry topics under 11.02 00 00 00 *Mathematics (7th and 8th grades)*, or which are not included in either of these lists or above. (Specify.)

11.11 02 03 00 Algebra and Statistics

Topics in algebra and statistics studied in general mathematics frequently include:

11.11 02 03 01

Introduction to algebra, including symbols, formulas, positive and negative numbers, equations, and inequalities

11.11 02 03 02

Ratio and proportions, trigonometry of the right triangle

11.11 02 03 03

Calculation of mean, median, and mode

11.11 02 03 04

Statistical graphs

11.11 02 03 05

Informal numerical probability

11.11 02 03 99 *Other Algebra and Statistics Topics in Second-year General Mathematics*

Include here other topics in algebra and statistics emphasized in the second year of general mathematics which may be identified in the list under 11.03 00 00 00 *Algebra* or under 11.15 00 00 00 *Probability and Statistics* or under 11.02 00 00 00 *Mathematics (7th and 8th grades)*, or which are not included in these lists or above. (Specify.)

11.11 03 00 00. Third-year General Mathematics

(For description of the subject matter select from the following topics.)

11.11 03 01 00 Arithmetic

The following topics in arithmetic are frequently included in general mathematics:

11.11 03 01 01

Basic concepts and skills, including notation and numeration systems and systems of natural, whole, rational, and real numbers

11.11 03 01 02

Applications of percentage and fundamental operations, e.g., interest, borrowing and lending money, discount, taxes, commissions, insurance, social security, and installment buying

11.11 03 01 03

Elementary number theory: primes, factors, and composites

11.11 03 01 99 *Other Arithmetic Topics in Third-year General Mathematics*

Include here other topics in arithmetic emphasized in the third year of general mathematics which may be identified in the list of arithmetic topics under 11.02 00 00 00 *Mathematics (7th and 8th*



## 11 MATHEMATICS—(Continued)

grades), or which are not listed above or under *Mathematics (7th and 8th grades)*. (Specify.)

### 11.11 03 02 00 Geometry

Topics in geometry studied in general mathematics frequently include:

#### 11.11 03 02 01

Measurement such as angular, area, length, and volume

#### 11.11 03 02 02

Use of instruments such as the straight edge, compass, and protractor for construction of geometric figures

#### 11.11 03 02 03

Calculation of perimeter, area, and volume

#### 11.11 03 02 04

Construction of models: two-dimensional, three-dimensional

#### 11.11 03 02 05

Indirect measurement including scale drawing, similar triangles, and numerical trigonometry

#### 11.11 03 02 06

The Pythagorean rule and its application

### 11.11 03 02 99 *Other Geometry Topics in Third-year General Mathematics*

Include here other topics in geometry emphasized in the third year of general mathematics which may be identified in the list of topics under 11.12 00 00 00 *Geometry* or in the list of geometry topics, under 11.02 00 00 00 *Mathematics (7th and 8th grades)*, or which are not included in either of these lists or above. (Specify.)

### 11.11 03 03 00 Algebra and Statistics

Topics in algebra and statistics studied in general mathematics frequently include:

#### 11.11 03 03 01

Introduction to algebra, including symbols, formulas, positive and negative numbers equations, and inequalities

#### 11.11 03 03 02

Ratio and proportions; trigonometry of the right triangle

#### 11.11 03 03 03

Calculation of mean, median, and mode

#### 11.11 03 03 04

Statistical graphs

#### 11.11 03 03 05

Informal numerical probability

### 11.11 03 03 99 *Other Algebra and Statistics Topics in Third-year General Mathematics*

Include here other topics in algebra and statistics emphasized in the third year of general mathematics which may be identified under 11.03 00 00 00 *Algebra* or under 11.15 00 00 00 *Probability and Statistics* or under 11.02 00 00 00 *Mathematics (7th and 8th grades)*, or which are not included in these lists or above. (Specify.)

### 11.11 04 00 00 Fourth-year General Mathematics

(For description of the subject matter select from the following topics.)

#### 11.11 04 01 00 Arithmetic

The following topics in arithmetic are frequently included in general mathematics:

##### 11.11 04 01 01

Basic concepts and skills, including notation and numeration systems and systems of natural, whole, rational, and real numbers

##### 11.11 04 01 02

Applications of percentage and fundamental operations, e.g., interest, borrowing and lending money, discount, taxes, commissions, insurance, social security, and installment buying

##### 11.11 04 01 03

Elementary number theory: primes, factors, and composites

### 11.11 04 01 99 *Other Arithmetic Topics in Fourth-year General Mathematics*

Include here other topics in arithmetic emphasized in the fourth year of general mathematics which may be identified in the list of arithmetic topics

under 11.02 00 00 00 *Mathematics (7th and 8th grades)*, or which are not listed above or under *Mathematics (7th and 8th grades)*. (Specify.)

11.11 04 02 00 Geometry  
Topics in geometry studied in general mathematics frequently include:

11.11 04 02 01  
Measurement such as angular, area, length, and volume

11.11 04 02 02  
Use of instruments such as the straightedge, compass, and protractor for construction of geometric figures

11.11 04 02 03  
Calculation perimeter, area, and volume

11.11 04 02 04  
Construction of models: two-dimensional, three-dimensional

11.11 04 02 05  
Indirect measurement including scale drawing, similar triangles, and numerical trigonometry

11.11 04 02 06  
The Pythagorean rule and its application

11.11 04 02 99 *Other Geometry Topics in Fourth-year General Mathematics*  
Include here other topics in geometry emphasized in the fourth year of general mathematics which may be identified in the list of topics under 11.12 00 00 00 *Geometry* or in the list of geometry topics under 11.02 00 00 00 *Mathematics (7th and 8th grades)*, or which are not included in either of these lists or above. (Specify.)

11.11 04 03 00 Algebra and Statistics  
Topics in algebra and statistics studied in general mathematics frequently include:

11.11 04 03 01  
Introduction to algebra, including symbols, formulas, positive and negative numbers, equations, and inequalities

11.11 04 03 02  
Ratio and proportion; trigonometry of the right triangle

11.11 04 03 03  
Calculation of mean, median, and mode

11.11 04 03 04  
Statistical graphs

11.11 04 03 05  
Informal numerical probability

11.11 04 03 99 *Other Algebra and Statistics Topics in Fourth-year General Mathematics*  
Include here other topics in algebra and statistics emphasized in the fourth year of general mathematics which may be identified in the list under 11.03 00 00 00 *Algebra* or under 11.15 00 00 00 *Probability and Statistics* or under 11.02 00 00 00 *Mathematics (7th and 8th grades)*, or which are not included in these lists or above. (Specify.)

## 11.12 00 00 00 GEOMETRY

The branch of mathematics in which the subject matter is designed to provide opportunities for pupils to (1) acquire information about geometric figures in the plane and in space, (2) gain understanding of the deductive method of thinking, (3) develop skill in applying the deductive method to mathematical situations, and (4) develop creative thinking by means of original exercises involving both the discovery of relationships and their proofs. Geometry is the subject matter of mathematics which emphasizes the use of logic in establishing proofs concerned with relationships involving points and lines in two- and three-dimensional space. The following topics are usually included for study in geometry. (Topics selected from the following list, as well as topics not listed below, may serve to describe the instructional subject matter of geometry—plane geometry, solid geometry, plane and solid geometry (integrated), and other geometry.)

11.12 00 01 00  
Properties of common geometric figures: (a) in the plane, and (b) in-space

11.12 00 02 00  
The nature of proof: undefined items, definitions, assumptions, inductive and deductive reasoning, and elementary logic

## 11. MATHEMATICS--(Continued)

11.12 00 03 00

Statement and proof of conjectures involving geometric relationships

11.12 00 04 00

Proof of theorems related to (a) plane figures--points, lines, angles, polygons, circles, and others, and (b) space--points, lines, planes, and solids

11.12 00 05 00

Problem solving: numerical applications involving geometric figures and properties; algebraic methods in the solution of geometric problems

11.12 00 06 00

Constructions with ruler and compasses; proofs

11.12 00 07 00

Geometric drawing in two and three dimensions

11.12 00 08 00

Geometric measurement: linear, angular, surface, and space

11.12 00 09 00

Coordinate geometry in (a) the plane, and (b) space

11.12 00 10 00

Simple trigonometric relationships of the right triangle

11.12 00 11 00

Consideration of the existence of non-Euclidean geometries

11.12 00 99 00 Other Topics in Geometry

Include here other topics emphasized in geometry which are not listed above. (Specify.)

11.12 01 00 00 Analytic Geometry

The study of plane and solid Euclidean geometry by means of coordinate systems and the associated representations of geometric objects by algebraic ones. The following topics usually are included for study:

11.12 01 01 00

The Euclidean plane and the Cartesian plane

11.12 01 02 00

Line segments, slopes, angles, length, and area

11.12 01 03 00

Equations and properties of lines

11.12 01 04 00

Geometric and algebraic invariance--the idea of analytic proof of geometric theorems

11.12 01 05 00

Loci in the plane, including circles

11.12 01 06 00

Graphs, symmetries, reflections, and tangents

11.12 01 07 00

Conics (ellipse, parabola, hyperbola)

11.12 01 08 00

Polar coordinate and loci

11.12 01 09 00

Parametric representations--higher plane and space curves

11.12 01 10 00

Vector methods; projection

11.12 01 99 00 Other Topics in Analytic Geometry

Include here other topics emphasized in analytic geometry which are not listed above. (The more advanced topics may include differential geometry applying calculus to analytic geometry and analytic non-Euclidean geometries such as the geometry to the sphere or of special relativity.) (Specify.)

11.12 02 00 00 Plane Geometry

(For description of the subject matter select from the following topics.)

11.12 02 01 00

Properties of common geometric figures: (a) in the plane, and (2) in space

11.12 02 02 00

The nature of proof: undefined items, definitions, assumptions, inductive and deductive reasoning, and elementary logic

11.12 02 03 00

Statement and proof of conjectures involving geometric relationships

11.12 02 04 00

Proof of theorems related to (a) plane figures—points, lines, angles, polygons, circles, and others, and (b) space—points, lines, planes, and solids

11.12 02 05 00

Problem solving: numerical applications involving geometric figures and properties; algebraic methods in the solution of geometric problems

11.12 02 06 00

Construction with ruler and compasses; proofs

11.12 02 07 00

Geometric drawing in two and three dimensions

11.12 02 08 00

Geometric measurement: linear, angular, surface, and space

11.12 02 09 00

Coordinate geometry in (a) the plane, and (b) space

11.12 02 10 00

Simple trigonometric relationships of the right triangle

11.12 02 11 00

Consideration of the existence of non-Euclidean geometries

11.12 02 99 00 Other Topics in Plane Geometry

Include here other topics emphasized in plane geometry which are not listed above. (Specify.)

11.12 03 00 00 Plane and Solid Geometry

(For description of the subject matter select from the following topics.)

11.12 03 01 00

Properties of common geometric figures: (a) in the plane, and (b) in space

11.12 03 02 00

The nature of proof: undefined items, defi-

nitions, assumptions, inductive and deductive reasoning, and elementary logic

11.12 03 03 00

Statement and proof of conjectures involving geometric relationships

11.12 03 04 00

Proof of theorems related to (a) plane figures—points, lines, angles, polygons, circles, and others, and (b) space—points, lines, planes, and solids

11.12 03 05 00

Problem solving: numerical applications involving geometric figures and properties; algebraic methods in the solution of geometric problems

11.12 03 06 00

Constructions with ruler and compasses; proofs

11.12 03 07 00

Geometric drawing in two and three dimensions

11.12 03 08 00

Geometric measurement: linear, angular, surface, and space

11.12 03 09 00

Coordinate geometry in (a) the plane, and (b) space

11.12 03 10 00

Simple trigonometric relationships of the right triangle

11.12 03 11 00

Consideration of the existence of non-Euclidean geometries

11.12 03 99 00 Other Topics in Plane and Solid Geometry

Include here other topics emphasized in plane and solid geometry which are not listed above. (Specify.)

11.12 04 00 00 Solid Geometry

(For description of the subject matter select from the following topics.)

11.12 04 01 00

## 11 MATHEMATICS--(Continued)

Properties of common geometric figures. (a) in the plane, and (b) in space

11.12 04 02 00

The nature of proof: undefined items, definitions, assumptions, inductive and deductive reasoning, and elementary logic

11.12 04 03 00

Statement and proof of conjectures involving geometric relationships

11.12 04 04 00

Proof of theorems related to (a) plane figures—points, lines, angles, polygons, circles, and others, and (b) space—points, lines, planes, and solids

11.12 04 05 00

Problem solving: numerical applications involving geometric figures and properties; algebraic methods in the solution of geometric problems

11.12 04 06 00

Constructions with ruler and compasses; proofs

11.12 04 07 00

Geometric drawings in two and three dimensions

11.12 04 08 00

Geometric measurement. linear, angular, surface, and space

11.12 04 09 00

Coordinate geometry in (a) the plane and (b) space

11.12 04 10 00

Simple trigonometric relationships of the right triangle

11.12 04 11 00

Consideration of the existence of non-Euclidean geometries

11.12 04 99 00 Other Topics in Solid Geometry

Include here other topics emphasized in solid geometry which are not listed above. (Specify.)

11.12 99 00 00 Other Geometry

Include here other organized subject matter emphasized in geometry not classifiable or listed above. (Specify.)

11.13 00 00 00 INTRODUCTION TO ANALYSIS

The learning experiences and subject matter concerned with selected aspects of algebra, trigonometry, and analytic geometry which are organized into an integrated body of content. In practice, the concept of a limit and the functions of real numbers are emphasized. The following topics in mathematics are usually included in the introduction to analysis:

11.13 00 01 00

The algebra of real numbers

11.13 00 02 00

Coordinates of a point in a plane

11.13 00 03 00

Lines and planes in space

11.13 00 04 00

Vectors and complex numbers

11.13 00 05 00

Limits, including the derivative and the concept of an integral

11.13 00 06 00

Polynomials

11.13 00 07 00

The conic sections

11.13 00 08 00

Periodic functions

11.13 00 09 00

Exponentials and logarithmic functions

11.13 00 99 00 Other Topics in Introduction to Analysis

Include here other topics emphasized in introduction to analysis which are not listed above. (Specify.)

11.14 00 00 00 LIBERAL ARTS MATHEMATICS

An organization of subject matter concerned with the cultural relevance and meaning of mathematics designed for pupils for whom technical mathematics is

inappropriate. Sometimes this is a full-year course for elementary teachers; but frequently the course for elementary teachers is separate and more specialized. Usually, the subject matter of liberal arts mathematics is not designed to comprise a part of a sequential prerequisite for calculus, or science, or engineering courses. The subject matter is not standard, but is usually chosen to illustrate the role of mathematics in the development of western civilization, the philosophy and the nature of mathematics, and the relation of mathematics to logic.

Often miniature deductive geometries of algebraic systems of novel subject matter are included. Material from number theory has been found to be interesting and to require a minimum of technique. Some stochastic models are usually introduced for contrast with deterministic ones. The number system and its history was formerly considered good material for this course but recently has come to be regarded as inappropriate because pupils regard it as familiar to the point of contempt.

#### 11.15 00 00 00 PROBABILITY AND STATISTICS

The study of the first semester of calculus with analytic geometry is frequently required as prerequisite to the study of probability and statistics. The following topics are usually included in probability and statistics: (The study of topics identified with an asterisk (\*) is dependent on the first semester of calculus with analytic geometry.)

- 11.15 00 01 00  
Sample spaces; events as subsets
- 11.15 00 02 00  
Probability axioms
- 11.15 00 03 00  
Finite sample spaces and equiprobable measures
- 11.15 00 04 00  
Counting and binomial coefficients
- 11.15 00 05 00  
\* Conditional probability and independent events
- 11.15 00 06 00  
Random variables
- 11.15 00 07 00

#### Density and distribution functions

- 11.15 00 08 00  
Special distributions: binomial, hypergeometric, Poisson\*, uniform, normal\*, and exponential\*
- 11.15 00 09 00  
Limit theorems\*: Poisson\* and normal approximations\*, law of large numbers, and Central Limit Theorem\*
- 11.15 00 10 00  
Descriptive statistics: means, variances, and moments,
- 11.15 00 11 00  
Statistical inference: estimation and sampling
- 11.15 00 12 00  
Hypothesis testing; regression
- 11.15 00 99 00 Other Topics in Probability and Statistics  
Include here other topics emphasized in probability and statistics which are not listed above. (Specify.)
- 11.16 00 00 00 TRIGONOMETRY  
The study of trigonometric ratios and the circular functions—their relationships, graphs, and applications. Problem solving is emphasized throughout the subject matter. In practice, the following topics in trigonometry usually are included for study:
  - 11.16 00 01 00  
Right-triangle trigonometry
  - 11.16 00 02 00  
Oblique-triangle trigonometry
  - 11.16 00 03 00  
Construction and use of trigonometric tables
  - 11.16 00 04 00  
Unit circle, the winding function, and periodicity
  - 11.16 00 05 00  
Trigonometric functions of real numbers; radians

## 11 MATHEMATICS—(Continued)

11.16 00 06 00

Graphs of trigonometric functions

11.16 00 07 00

Inverse trigonometric functions and their graphs

11.16 00 08 00

Special formulas

11.16 00 09 00

Trigonometric identities and conditional equations

11.16 00 10 00

Complex numbers; vectors

11.16 00 11 00

Polar representations

11.16 00 99 00 Other Topics in Trigonometry

Include here other topics emphasized in trigonometry which are not listed above. (Specify.)

### 11.99 00 00 00 OTHER MATHEMATICS

Include here other organized subject matter emphasized in mathematics which is not listed or classifiable above. (Specify.)

## MUSIC

12.00 00 00 00

Music is the fine art that utilizes sounds in time in a meaningful and organized manner. Subject matter and activities in music are designed to impart the skills and knowledge necessary for the understanding, appreciation, creation, performance, and enjoyment of music.

The Ad Hoc Committee for Music applied the following rationale to the selection of the items for placement in the Music area. (1) the various items selected and classified were determined by consensus of the committee to include the aspects of music most commonly taught in the United States; (2) the various aspects of subject matter selected for classification could be defined in brief form using only salient descriptive elements; and (3) the items were identifiable by titles which were considered to be most commonly used in current practice in music.

Opportunities are frequently provided both during

and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of music as an integral part of the instructional program. As an example, the Music Club provides additional opportunities to explore interests, apply various acquired skills, increase knowledge about different aspects of music, and develop appreciation for music in our culture. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146; and they are described more fully in this chapter beginning on page 242. As an illustration, the Music Club is identified for reporting purposes under Cocurricular Activities as Item 20.01 21 00 00.

Many items of information in chapter 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples, see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included in this subject-matter area are the items of information which identify the various subjects in the music area.

### 12.01 00 00 00 MUSIC (GENERAL EDUCATION)

Organized subject matter and musical experiences consisting of an extensive and varied study of music designed for all pupils. The purpose of these music experiences is to provide basic education in music similar to that in other subject areas necessary to general cultural development. Through participation and study, pupils develop basic musical skills and gain insights into the art of music.

### 12.02 00 00 00 MUSIC LITERATURE AND/OR HISTORY

Organized subject matter and learning experiences designed to further pupils' knowledge, comprehension, and appreciation of various types and styles of music.

### 12.03 00 00 00 MUSIC THEORY

The study of principles of music, including rudiments, harmony, counterpoint, form and analysis, and orchestration; skills such as sight singing, ear training, and conducting; and composition. In practice, the various aspects of music theory may be organized into more specific bodies of subject matter for instruction such as the following:

12.03 01 00 00 Fundamentals

12.03 02 00 00 Harmony

12.03 99 00 00 Other Music Theory

Include here other organized subject matter and experiences emphasized in music theory which are not listed above. (Specify.)

12.04 00 00 00 VOCAL MUSIC

Learning experiences designed for the study of vocal repertoire and the development of vocal skills through solo and choral performance. Subject matter is organized to provide for instruction in a variety of situations such as:

12.04 01 00 00 Choir, Chorus, and/or Glee Club

A large ensemble of pupils organized to study, rehearse, and perform choral literature in various combinations. This musical experience provides opportunities for the pupil to gain knowledge and understanding and to develop skills through performance in groups such as the following:

12.04 01 01 00 Female

12.04 01 02 00 Male

12.04 01 03 00 Mixed

12.04 02 00 00 Vocal Instruction

Instruction designed for developing skills and knowledge in vocal performance in situations such as the following:

12.04 02 01 00 Group

12.04 02 02 00 Individual

12.04 03 00 00 Small Vocal Ensembles

A vocal chamber group such as a trio, quartet, octet, and/or madrigal ensemble that offers opportunities not available in larger groups.

12.04 99 00 00 Other Vocal Music

Include here other organized subject matter and learning experiences emphasized in vocal music which are not listed above. (Specify.)

12.05 00 00 00 INSTRUMENTAL MUSIC

Learning experiences designed for the study of instrumental repertoire and the development of instru-

mental skills through solo and group performance. Subject matter is organized to provide for instruction in a variety of situations such as:

12.05 01 00 00 Band

An ensemble of wind and percussion players organized to study, rehearse, and perform the repertoire for this medium. Among the different classifications of bands, depending upon size, repertoire, and function, are the following which are organized for instruction:

12.05 01 01 00 Concert

12.05 01 02 00 Marching

12.05 01 03 00 Stage

12.05 01 99 00 Other Band

Include here other organized subject matter and experiences emphasized in band which are not listed above. (Specify.)

12.05 02 00 00 Orchestra

An ensemble of string, wind, and percussion players organized to study, rehearse, and perform the repertoire for this medium. Among the different combinations of orchestras, depending upon size, repertoire, and function, are the following which are organized for instruction:

12.05 02 01 00 Chamber

12.05 02 02 00 Full

12.05 02 03 00 String

12.05 02 99 00 Other Orchestra

Include here other organized subject matter and experiences emphasized in orchestra which are not listed above. (Specify.)

12.05 03 00 00 Small Instrumental Ensembles

An instrumental chamber group such as a trio, quartet, or quintet that offers opportunities not available in larger groups.

12.05 04 00 00 Instrumental Instruction

Instruction designed for developing skills and knowledge in instrumental performance in situations such as the following:



## 12 MUSIC--(Continued)

12.05 04 01 00 Group

12.05 04 02 00 Individual

12.05 99 00 00 Other Instrumental Music

Include here other organized subject matter and experiences emphasized in instrumental music which are not listed above. (Specify.)

### 12.06 00 00 00 RHYTHM AND BODY MOVEMENT

(For definition see 08.03 04 02 00 *Rhythms* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)

### 12.07 00 00 00 HUMANITIES

The study of a group of related subjects such as art, literature, music, religion, history, philosophy, and classical and modern foreign languages—with music usually forming the core—concerned with man's individual cultural achievements and values in society as distinguished from social institutions and customs of the natural world. Sometimes aspects of the various subject-matter areas are taught separately but relatedly; in other instances these aspects of subject-matter areas are fused or integrated. (See also 02.01 03 00 00 *Humanities* under ART, 05.03 69 00 00 *Humanities* under ENGLISH LANGUAGE ARTS, 03.03 00 00 00 *Humanities* under FOREIGN LANGUAGES, and 15.09 00 00 00 *Humanities* under SOCIAL SCIENCES/SOCIAL STUDIES.)

### 12.99 00 00 00 OTHER MUSIC

Include here other organized subject matter and experiences emphasized in music which are not listed or classifiable under one of the major categories above. (Specify.)

## NATURAL SCIENCES

13.00 00 00 00

The natural sciences include the body of related subject matter, or the body of related courses, organized for carrying on learning experiences concerned with knowledge of the physical and biological world, and of the processes of discovering and validating this knowledge.

The Ad Hoc Committee for Natural Sciences applied the following rationale to the selection of

substantive content for placement in the Natural Sciences area: (1) the items selected and classified were determined by the committee as representing the subject matter most commonly taught in natural sciences in the United States; (2) the various aspects of subject matter were identified by titles which were considered as being most commonly used; and (3) the various aspects of subject matter could be defined in brief form using only salient descriptive elements.

Opportunities are frequently provided both during and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of natural sciences as an integral part of the instructional program. As an example, the Science Club provides additional opportunities to pursue personal interests, apply various acquired skills, and develop leadership qualities through club activities. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. A variety of activities is identified under 20.00 00 00 00 *Cocurricular Activities* in chapter 5 beginning on page 146; and they are described more fully in this chapter beginning on page 242. As an illustration, the Science Club is identified for reporting purposes under *Cocurricular Activities* as Item 20.01 28 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples, see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included in this subject-matter area are the items of information which identify various aspects of the natural sciences.

### 13.01 00 00 00 GENERAL SCIENCE (INCLUDING ELEMENTARY SCHOOL SCIENCE)

An organization of subject matter which usually includes representative topics from the biological, physical, and earth-space sciences. Learning experiences involve pupils in observing, exploring, discovering, and experimenting for purposes of achieving understanding of how scientists work and what they know about the universe. General science is primarily studied in elementary and junior high schools, but similar courses with titles such as *Comprehensive Science* or *Survey of Sciences* are offered at the senior high school or junior college level.

If desired, the subject matter of instruction in general science may be described in greater detail through the use of the appropriate topic titles included in items 13.02 00 01 00-13.02 00 24 00, 13.03 00 01 00-13.03 00 34 00, and 13.04 00 01 00-13.04 00 19 00.

### 13.02 00 00 00 BIOLOGICAL SCIENCES (INCLUDING GENERAL BIOLOGY)

The environments, interrelationships, processes, classification, evolution, and structure and function of living organisms—plants, protists, and animals.

13.02 01 00 00 Botany  
The study of plants.

13.02 02 00 00 Microbiology  
The study of bacteria, viruses, algae, fungi, and other monera and protista.

13.02 03 00 00 Zoology  
The study of animals.

13.02 99 00 00 Other Biological Sciences  
Include here other biological sciences which are emphasized in instruction and are not listed above. (Specify.)

### MAJOR ASPECTS OF THE BIOLOGICAL SCIENCES:

13.02 00 01 00 Anatomy  
The branch of biology that relates to the structure of a living organism or any of its parts.

13.02 00 02 00 Anthropology  
The science of man, both physical and cultural, and the relationship of man to his cultural environment and to the societies in which he groups himself. (See also 15.01 06 00 00 *Physical Anthropology* under SOCIAL SCIENCES/SOCIAL STUDIES.)

13.02 00 03 00 Bacteriology  
The science which deals with the study of microorganisms and their effects on other organisms. This may include such topics as viruses, fungi, aerobic and anaerobic bacteria, antitoxins, antibiotics, antigens, and bacteriophage.

13.02 00 04 00 Behavior  
The science which deals with the ways in

which an organism responds to stimuli, its activity or change in relation to the environment, conditioning tropisms, irritability, and innate and learned behavior.

13.02 00 05 00 Biochemistry  
The branch of chemistry that deals with plants and animals and their life processes.

13.02 00 06 00 Biometrics  
The science of measurement and statistics as used in connection with plants and animals

13.02 00 07 00 Biophysics  
The application of physical principles and methods to biological organisms and their processes.

13.02 00 08 00 Cellular Phenomena (Cytology)  
The area of biology which considers the cell as a unit of organization in plants and animals and gives consideration to the structure, function, pathology, and life history of cells.

13.02 00 09 00 Conservation (Environment)  
The science concerned with the development, protection, use, and management of all our resources for the needs and enjoyment of all the people. Emphasis in instruction may be on natural or human resources, or both.

13.02 00 10 00 Development Biology  
Those processes and events in development which relate to or include growth, cellular differentiation and morphogenesis.

13.02 00 11 00 Ecology  
The study of natural mutual relationships between organisms and all factors comprising their environment.

13.02 00 12 00 Entomology  
The science that deals with all knowledge pertaining to insects.

13.02 00 13 00 Evolution  
The study of the processes and changes by which any living organism acquires the morphological and physiological characteristics which distinguish it from other living things.

13.02 00 14 00 Genetics  
The study of the production and development of varieties by the transmission of traits from

### 13 NATURAL SCIENCES--(Continued)

parents to offspring. Aspects of this study include trait inheritance, variation, and genetic code.

#### 13.02 00 15 00 Molecular Biology

The area of biology which considers the living organism at the molecular level and gives consideration to such topics as molecular structure and process, metabolic energy, respiration, photosynthesis, DNA and RNA.

#### 13.02 00 16 00 Nature Study

The consideration of objects, organisms, and their environment and behavior in nature.

#### 13.02 00 17 00 Nutrition

The study of biochemical and physiological processes by which plants and animals take in, absorb, and transport food substances for promoting growth and other body functions.

#### 13.02 00 18 00 Organic Systems

The study of systems essential to life processes, such as the circulatory, respiratory, digestive, excretory, nervous, skeletal, and reproductive systems.

#### 13.02 00 19 Origins of Life

The study of the phyletic origins of present day forms of life from previously existing forms.

#### 13.02 00 20 00 Physiology

The branch of biology that relates to the functions of living organisms or any of their parts.

#### 13.02 00 21 00 Reproduction

The study of the process by which plants and animals give rise to offspring by either asexual or sexual means.

#### 13.02 00 22 00 Taxonomy

The study of the science which considers the nomenclature and classification of living organisms and the logic and method of such classification.

#### 13.02 00 23 00 Technological Applications

The study of aspects of the biological science, as oriented to the needs of individuals, industries, or government, this includes applications in research, production, and human welfare.

#### 13.02 00 99 00 Other Major Aspects of the Biological Sciences

Include here other major aspects of the biological sciences which are emphasized in instruction and are not listed above. (Specify.)

### 13.03 00 00 00 PHYSICAL SCIENCES (INCLUDING GENERAL PHYSICAL SCIENCE)

The organization of subject matter that usually includes for study the major topics, concepts, processes, and interrelationships of chemistry and physics. Considerations may sometimes be given to topics which are included under the earth-space sciences, such as geology and astronomy.

#### 13.03 01 00 00 Chemistry

The study of the composition, structure, and properties of matter, and of changes in matter, including the accompanying energy phenomena.

#### 13.03 02 00 00 Physics

The study of the branch of science that is concerned with matter and energy, including the study of phenomena associated with mechanics, heat, wave motion, sound, electricity and magnetism, light, and atomic and nuclear structure.

#### 13.03 99 00 00 Other Physical Sciences

Include here other physical sciences (not including "earth-space sciences") which are emphasized in instruction and are not listed above. (Specify.)

### MAJOR ASPECTS OF THE PHYSICAL SCIENCES:

#### 13.03 00 01 00 Astronomy

(For definitions see 13.04 01 00 00 *Astronomy* under Earth-Space Sciences.)

#### 13.03 00 02 00 Atomic and Molecular Structure

The study of such areas as the atomicity of matter, the structure of atoms and molecules, and atomic and molecular spectra.

#### 13.03 00 03 00 Biochemistry

(For definition see 13.02 00 05 00 *Biochemistry* under Biological Sciences.)

#### 13.03 00 04 00 Biophysics

(For definition see 13.02 00 07 00 *Biophysics* under Biological Sciences.)

13.03 00 05 00 Chemical Bonding

The study of the bonding among atoms in ions and molecules: types, lengths, and strengths of bonds; geometry of molecules, relationships of bonds to the physical and chemical properties of substances and energy considerations.

13.03 00 06 00 Chemical Calculations

The quantitative treatment of chemical reactions and solution phenomena such as manipulation of units in solving problems, uncertainty, significant figures, and use of the slide rule.

13.03 00 07 00 Chemical Reactions

The study of chemical changes, including topics such as formulas, equations, oxidation-reduction, equilibrium conditions, rates of reaction and energy effects.

13.03 00 08 00 Electricity and Magnetism

The study of static and moving electric charges, electric and magnetic fields, electric circuits (direct- and/or alternating-current phenomena) and electromagnetic effects.

13.03 00 09 00 Electronics

The study of such topics as the controlled flow of charged particles through a gas, vacuum, or crystal lattice, thermionic emission, amplification, rectification, light-sensitive devices and indicators (e.g., cathode ray tubes), television, semiconductors and transistors.

13.03 00 10 00 Equilibrium

The study of factors affecting the extent of a chemical reaction such as the dynamic nature of the equilibrium condition, equilibrium constants, free energy, and Le Chatelier's principle.

13.03 00 11 00 Geology

(For definition see 13.04 02 00 00 *Geology* under Earth-Space Sciences.)

13.03 00 12 00 Heat

The study of this form of energy in relation to changes of state, temperature, gas laws, molecular motion, and thermodynamic laws.

13.03 00 13 00 Inorganic Chemistry

The study of the chemistry of noncarbon compounds.

13.03 00 14 00 Kinetic Molecular Theory

The study of heat and pressure phenomena based on the motions and collisions of atoms and molecules, temperature, gas laws, energy equivalences, and conservation.

13.03 00 15 00 Materials Science

The study of the structure, reactions, functions, and synthesis of alloys, ceramics, and plastics.

13.03 00 16 00 Measurement

Includes the study of units, instruments, limits of errors, comprehension of scale, and statistical analysis associated with the comparison of some physical characteristic with an accepted standard.

13.03 00 17 00 Mechanics

The study of forces and their relation to the motion of bodies: Newton's Laws, conservation principles, energy and momentum, machines, and forces in fluids.

13.03 00 18 00 Meteorology

(For definition see 13.04 03 00 00 *Meteorology* under Earth-Space Sciences.)

13.03 00 19 00 Nuclear Science

The study of areas such as the structure of the nucleus, radioactivity, energy-mass equivalence, radiation detection and measurement, and energy effects produced when nuclear particles are disturbed by external forces.

13.03 00 20 00 Oceanography

(For definition see 13.04 04 00 00 *Oceanography* under Earth-Space Sciences.)

13.03 00 21 00 Optics

The study of the nature and propagation of light and other electromagnetic radiations, wave characteristics, geometrical optics (mirrors and lenses), color, and vision.

13.03 00 22 00 Organic Chemistry

The study of the chemistry of carbon compounds—their properties, chemical behavior, preparation, and uses.

13.03 00 23 00 Periodic Properties

The study of the periodicity in the properties of elements and relationship to atomic structure.

13.03 00 24 00 Physical Chemistry

## 13 NATURAL SCIENCES--(Continued)

The study of the application of physical principles to chemical systems: gas laws, thermodynamics, kinetics, solubility phenomena, and equilibrium.

### 13.03 00 25 00 Qualitative Analysis

The branch of chemistry concerned with the detection or identification of a substance (element, ion, or compound) by nonquantitative tests.

### 13.03 00 26 00 Quantitative Analysis

The branch of chemistry concerned with the determination of the amount of a substance (element, ion, or compound) by quantitative tests.

### 13.03 00 27 00 Quantum Mechanics

Includes the study of the behavior of electrons and nucleons, the duality of energy and matter (wave and particle models), relativity, statistical and wave mechanics, and all aspects of quantum theory.

### 13.03 00 28 00 Solid State Physics

The study of the structure and properties of solids such as crystals, alloys, semiconductors, superconductors, and plastics; this includes theoretical aspects of transistors, lasers, and ceramic devices.

### 13.03 00 29 00 Solution Phenomena

The study of the general behavior of solutions, solubility, ionization, acids-bases-salts, electrochemistry, hydrolysis, and concentration (molarity, normality).

### 13.03 00 30 00 Sound

The study of the sources and wave characteristics of sound, perception (hearing), acoustical treatments, and music.

### 13.03 00 31 00 Stoichiometry

The study of energy and material balances in chemical systems, multiple and definite proportions, and balancing equations.

### 13.03 00 32 00 Technological Applications

The study of aspects of the physical sciences as oriented to the needs of individuals, industries, or government, this includes applications in research, production, and human welfare.

### 13.03 00 33 00 Thermodynamics

The study of energy changes in physical and chemical systems, in physics, the interrelationships of heat and mechanical energy; and in chemistry, the relationship of heat to chemical reactions.

### 13.03 00 34 00 Wave Phenomena

The study of general characteristics of periodic wave motion (length, frequency, velocity, amplitude, energy transfer, reflection, refraction, interference, diffraction, . . .) with emphasis on similarities of different types of waves (light, sound).

### 13.03 00 99 00 Other Major Aspects of the Physical Sciences

Include here other major aspects of the physical sciences which are emphasized in instruction and are not listed above. (Specify.)

## 13.04 00 00 00 EARTH-SPACE SCIENCES (INCLUDING GENERAL EARTH-SPACE SCIENCE)

Facts, concepts, and principles of geology, astronomy, meteorology, oceanography, and space exploration which are interrelated in the study of the natural environment of both earth and space.

### 13.04 01 00 00 Astronomy

The study of matter and energy in the universe. This includes the solar system, stars, galaxies, nebulae, and other extragalactic phenomena. The instruments used for study and the related mathematics are important aspects of astronomy.

### 13.04 02 00 00 Geology

The study of the composition, structure, and history of the earth and of earth processes. Content areas such as mineralogy, petrology, structural geology, physiography, paleontology, historical geology, and economic geology may be included.

### 13.04 03 00 00 Meteorology

The science of the atmosphere and all of the aspects of matter-energy exchange. It involves the study of weather and climate, including humidity, temperature, atmospheric pressure, air masses and motion, clouds, precipitation, and interrelationships on both local and global scales.

### 13.04 04 00 00 Oceanography

The study of the oceans and other large bodies of water. Oceanography, which draws heavily from

physics, chemistry, marine biology, and geology, is concerned with processes, compositional features, the interactions with the atmosphere and lithosphere, and biological interrelationships.

#### 13.04 05 00 00 Space Exploration

The science of spacecraft, propulsion systems, launching, orbiting, rendezvous, spaceflight, solar-system destinations, and biological effects on man or other organisms.

#### 13.04 99 00 00 Other Earth-Space Sciences

Include here other earth-space sciences which are emphasized in instruction and are not listed above. (Specify.)

### MAJOR ASPECTS OF THE EARTH-SPACE SCIENCES:

#### 13.04 00 01 00 Aeronautics

The study of the structure of flight of aircraft—aviation.

#### 13.04 00 02 00 Astronautics

The study of the problems associated with travel in space.

#### 13.04 00 03 00 Biological Interrelationships

The study of the interactions between an organism and its environment as evidenced in paleontology, exobiology, marine biology, and ecology.

#### 13.04 00 04 00 Climatology

The study of climates, their causes and effects over long time periods, and on regional or global scales.

#### 13.04 00 05 00 Cosmology

The study of the principles, theories, and philosophy concerned with the nature of the universe as a whole, including its origin and evolution.

#### 13.04 00 06 00 Earth Changes

The study of the changes through geologic time (evolution), and the change in short periods of time, such as erosion, weathering, volcanic eruptions, and earthquakes.

#### 13.04 00 07 00 Forces and Motion

The study of gravitational, electromagnetic, and nuclear actions which result in various natural events such as air and ocean currents, planetary

motion, tides, seasons, and the thermonuclear reactions of the stars.

#### 13.04 00 08 00 Geochemistry

The study of the chemical composition, structure, and reactions of earth materials.

#### 13.04 00 09 00 Geophysics

The study of the physics of the earth and its environment in space, including phenomena such as fields and forces, mass and motion, time and space, and matter and energy.

#### 13.04 00 10 00 Hydrology

The study of water, including its various forms and properties; its distribution in oceans, lakes, streams, underground formations, glaciers, and in the atmosphere; and the hydrologic cycle.

#### 13.04 00 11 00 Instrumentation and Analytical Methods

The study of the instruments and techniques used to gather observations may be supplemented through the use of instruments such as spectrometers, telescopes, seismographs, microscopes, weather balloons, satellites, and sonar.

#### 13.04 00 12 00 Levels of Organization

The study concerned with systems of grouping and levels of complexity and magnitude of earth phenomena such as atoms, air masses, galaxies, minerals, rocks, and mountains, and scale and complexity.

#### 13.04 00 13 00 Matter-Energy Exchange

The study of the conservation of mass and energy and the exchange of these across the boundaries (interfaces) between lithosphere, hydrosphere, and atmosphere.

#### 13.04 00 14 00 Measurement

(For definition see 13.03 00 16 00 *Measurement* under Physical Sciences.)

#### 13.04 00 15 00 Paleontology

The study of prehistoric forms of life such as plant and animal fossils.

#### 13.04 00 16 00 Physical Geography

The study, description, and mapping of surface phenomena of the earth.

#### 13.04 00 17 00 Soil Science

### 13 NATURAL SCIENCES—(Continued)

The study of the formation, classification, mapping, and the physical, chemical, biological, and fertility properties of soils.

#### 13.04 00 18 00 Uniformitarianism

The study of existing processes as a key to understanding the past, based on the theoretical uniformity of all geologic processes throughout all time.

#### 13.04 00 19 00 Technological Applications

The study of aspects of the earth-space sciences as oriented to the needs of individuals, industries, or government, this includes applications in research, production, and human welfare.

#### 13.04 00 99 00 Other Major Aspects of the Earth-Space Sciences

Include here other major aspects of the earth-space sciences which are emphasized in instruction and are not listed above. (Specify.)

## OFFICE OCCUPATIONS

### 14.00 00 00 00

This body of subject matter, or combinations of courses and practical experience, is organized into programs of instruction to provide opportunities for pupils to prepare for and achieve career objectives in selected office occupations. In the instructional process various aspects of subject matter frequently are drawn from other subject-matter areas. Learning experiences are designed to lead to employment and/or advancement of individuals in occupations in public or private enterprises or organizations related to the facilitating function of the office. "Facilitating function," as used here refers to the expediting role played by office occupations as the connecting link between the production and distribution activities of an organization. Included is a variety of activities, such as recording and retrieval of data, supervision and coordination of office activities, internal and external communication, and the reporting of information.

The Ad Hoc Committee for Office Occupations applied the following criteria to the selection of substantive content for placement in the Office Occupations subject-matter area. (1) the content was determined by consensus of the committee to be unique and appropriate to office occupations in terms

of the Vocational Education Act of 1963; (2) subject-matter items could be defined in brief form using only salient descriptive elements, and (3) the various aspects of organized subject matter classified under Office Occupations were identifiable by titles which the *ad hoc* committee considered to be most appropriate to office occupations.

Opportunities are frequently provided both during and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of office occupations as an integral part of the instructional program. As an example, the Office Education Association provides additional opportunities to develop leadership, other qualities, and an understanding of the world of work in office occupations. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. They may be designed for participation of pupils as individuals or in groups, and are an integral part of classwork. A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146, and they are discussed more fully in this chapter beginning on page 242. As an illustration the Office Education Association is identified for reporting purposes and further described under Cocurricular Activities as Item 20.01 25 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Under this heading are the items of information which identify categories of career objectives in office occupations, and around which courses and practical experiences are developed.

### 14.01 00 00 00 ACCOUNTING AND COMPUTING OCCUPATIONS

Planned learning experiences which include a combination of courses and practical experiences concerned with systematizing information about transactions and activities into accounts and quantitative records, and paying and receiving money. Career objectives are identified with a variety of occupational groups and specialization (as indicated in the *Dictionary of Occupational Titles*), such as Junior Accountants, Bookkeepers, Cashiers, Machine Operators, Tellers, and Other Accounting and Computing Occu-

pations. (See also the category 03.01 00 00 00 *Accounting*, and 03.03 06 00 00 *Payroll Record Keeping*, 03.08 00 00 00 *Business Finance*, 03.09 00 00 00 *Business Law*, 03.12 00 00 00 *Business Statistics*, and 03.26 01 00 00 *Business Principles* under BUSINESS.)

#### 14.01 01 00 00 Accountants

Programs concerned with the paraprofessional duties supporting the accountant in organizing, designing, and controlling numerical and financial data. (D.O.T. No. 160. series)

#### 14.01 02 00 00 Bookkeepers

Programs concerned with computing, classifying, and recording numerical data to keep financial records. (D.O.T. No. 210. series) (See also the category 03.03 00 00 00 *Bookkeeping* under BUSINESS.)

#### 14.01 03 00 00 Cashiers

Programs concerned with receiving and disbursing money in establishments other than banks, and usually involving the use of machines, including cash registers and change makers. (D.O.T. No. 211. series)

#### 14.01 04 00 00 Machine Operators: Billing, Bookkeeping, and Computing

Programs concerned with operations and procedures utilizing office machines for billing, posting, calculating, adding, listing, and mechanizing data (other than business data processing equipment). (D.O.T. Nos. 214., 215., 216., and 217. series) (See also 03.03 05 00 00 *Machine Bookkeeping* and the category 03.10 00 00 00 *Business Machines* under BUSINESS.)

#### 14.01 05 00 00 Tellers

Programs concerned with disbursing and receiving money in a bank and recording the transactions. (D.O.T. No. 210. series)

#### 14.01 99 00 00 Other Accounting and Computing Occupations

Programs concerned with computing and accounting office occupations-emphasized in instruction which are not classified above, including emerging occupations. (D.O.T. No. 219. series) (Specify.)

#### 14.02 00 00 00 BUSINESS DATA PROCESSING SYSTEMS OCCUPATIONS

Planned learning activities which include a combination of courses and practical experiences concerned

with business data processing systems and operations. Career objectives are identified with various occupational groups and specializations (as indicated in the *Dictionary of Occupational Titles*), such as Computer and Console Operator, Peripheral Equipment Operators, Programmers, Systems Analysts, and other business data processing systems occupations. (See also 03.01 02 00 00 *Accounting Systems*, 03.01 05 00 00 *Cost Accounting*, 03.01 07 00 00 *Data Processing Accounting*, 03.12 00 00 00 *Business Statistics*, 03.17 00 00 00 *Data Processing and Computer Operations*, 03.17 01 00 00 *Introduction to Data Processing*, and 03.17 02 00 00 *Data Processing Systems* under BUSINESS.)

#### 14.02 01 00 00 Computer and Console Operators

Programs concerned with the operation of an electronic data processing computer, including reviewing program instructions, determining procedures for a specific run, readying equipment for operation, and manipulating and monitoring controls during operation. When computer trouble develops and halts the computer operation the operator is responsible for seeking the source of the trouble. (D.O.T. No. 213. series) (See also 03.17 05 00 00 *Computer Operation: Introduction* under BUSINESS.)

#### 14.02 02 00 00 Peripheral Equipment Operators

Programs concerned with the operation of equipment which is auxiliary or peripheral to the operation of the electronic data computer. Included are the operations of card-to-tape converters, tape-to-card converters, high-speed printers, and related equipment. (D.O.T. No. 213. series) (See also 03.17 06 00 00 *Processing Equipment Operations*, 03.17 06 02 00 *Tabulating Equipment Operation*, and 03.17 06 03 00 *Tabulating Machine Wiring* under BUSINESS.)

#### 14.02 02 01 00 Key Punch and Coding Equipment Operators

Programs concerned with operating alphabetic/numeric key-punch machines for transcribing data from source materials and machines that print identification codes on wire, tape, plastic tubing, and other materials including installing specified type, code letters, and symbols in mandrels. (D.O.T. No. 213. series) (See also 03.17 06 01 00 *Punch Card Data Processing* under BUSINESS.)



## 14 OFFICE OCCUPATIONS--(Continued)

### 14.02 02 99 00 Other Peripheral Equipment Operators

Programs concerned with peripheral equipment operations emphasized in instruction which are not classified above, including emerging occupations in this category. (D.O.T. Nos. 213. and 219. series) (Specify.)

### 14.02 03 00 00 Programmers

Programs concerned with converting symbolic statements of business problems to detailed logical flow charts for coding into computer language, including:

**ANALYZING** all or part of a workflow chart or diagram representing a business problem by applying knowledge of computer capabilities subject matter, algebra, and symbolic logic to develop the sequence of program steps;

**CONFERRING** with supervisors and representatives of departments concerned with programs to resolve questions of program intent, output requirements, input data acquisition, extent of automatic programming, coding and modification, and inclusions of interval checks and controls;

**WRITING** detailed logical flow charts in symbolic form to represent work order of data to be processed by a computer system, and to describe input, output, arithmetic, and logical operations involved;

**CONVERTING** detailed logical flow charts to language processible by computer,

**DEVisING** sample input data to provide testing of program adequacy,

**PREPARING** block diagrams to specify equipment configuration;

**OBSERVING** or operating a computer to test a coded program using actual or sample input data;

**CORRECTING** program errors by such methods as altering program steps and sequence,

**PREPARING** written instructions (run book) to guide operating personnel during production runs;

**ANALYZING**, revising and rewriting programs to increase operating efficiency or to adapt to new requirements;

**COMPILING** documentation of program development and subsequent revisions; and

**SPECIALIZING**, in some instances, in writing programs for one make and type of computer (D.O.T. No. 020. series) (See also 03.17 04 00 00 *Computer Programming* under BUSINESS.) (Included as 16.04 01 00 00 *Computer Programmer* under TECHNICAL EDUCATION.)

### 14.02 04 00 00 Systems Analysts

Programs concerned with analyzing and designing commercial systems, data methods, systems and procedures, and processing business data. Activities include analysis of business problems such as the development of integrated production, inventory control and cost, and the formulation and refinement of an analysis system for conversion to a programmable form for application to an electronic data processing system.

Activities frequently involve conferences with (1) the project director of business data processing and department heads of units involved to ascertain specific output requirements such as types of breakouts, degree of data summarization, and formats for management reports, and (2) management personnel of operating units to revise plans for obtaining and standardizing input data. (D.O.T. No. 012. series)

Among other responsibilities of the systems analyst are the study of current or the development of new systems and procedures to devise workflow sequence; the analysis of alternative means of deriving input data to select the most feasible and economical method; and the development of process flow charts in outlines and detailed form for programming, indicating external verification points such as trial audit printouts. Responsibilities may also include directing the preparation of programs, but does not include major responsibilities for technical, scientific, or exotic mathematics applications. (D.O.T. No. 020. series) (Included as 16.04 02 00 00 *Systems Analyst Technology* under TECHNICAL EDUCATION.)

### 14 02 99 00 00 Other Business Data Processing Systems Occupations

Programs concerned with business data processing systems occupations emphasized in instruction which are not classified above, e.g., tape librarians who are responsible for storing magnetic tapes used in processing data and making them available when they are again needed. (D.O.T. No. 223. series) (Specify.) (See also 03.17 99 00 00 *Other Data Processing and Computer Operation* under BUSINESS.)

#### 14.03 00 00 00 FILING, OFFICE MACHINES, AND GENERAL OFFICE CLERICAL OCCUPATIONS

Planned learning experiences which include a combination of courses and practical experiences concerned with the recording and retrieval of data, including classifying, sorting, and filing correspondence, records, and other data. Career objectives are identified with a variety of occupational groups and specialization (as indicated in the *Dictionary of Occupational Titles*), such as Duplicating Machine Operators, File Clerks, General Office Clerks, and other filing, office machines, and general office clerical occupations. (See also 03.10 00 00 00 *Business Machines* and 03.14 00 00 00 *Clerical Practice* under BUSINESS.)

##### 14.03 01 00 00 Duplicating Machine Operators

Programs concerned with reproducing handwritten or typewritten matter by use of duplicating machines and devices. Efficiency in the operation and proper maintenance of various types of duplicating equipment are emphasized. (D.O.T. No. 207 series) (See also 03.10 04 00 00 *Duplicating Machines* under BUSINESS.)

##### 14.03 02 00 00 File Clerk

Programs concerned with performing a variety of clerical duties utilizing knowledge of systems and reports, including copying data and compiling records and reports; tabulating and posting data in record books, providing information and conducting interviews, operating office machines, and handling mail and correspondence. (D.O.T. No. 219 series) (See also 03.22 00 00 00 *Filing and Record Control* under BUSINESS.)

##### 14.03 03 00 00 General Office Clerks

Programs concerned with performing a variety of clerical duties utilizing knowledge of systems and reports, including copying data and compiling records and reports, tabulating and posting data in record books, providing information and conducting interviews, operating office machines, and handling mail and correspondence. (D.O.T. No. 219 series) (See also 03.22 00 00 00 *Filing and Record Control* under BUSINESS.)

##### 14.03 99 00 00 Other Filing, Office Machines, and General Office Clerical Occupations

Programs concerned with filing, office machines, and general office clerical occupations empha-

sized in instruction which are not classified above, including emerging occupations. (D.O.T. Nos. 208. and 209. series) (Specify.)

#### 14.04 00 00 00 INFORMATION COMMUNICATION OCCUPATIONS

Learning experiences which include a combination of courses and practical experiences concerned with the distribution of information, e.g., by mail, telephone, telegraph, and in person. Career objectives are identified with a variety of occupational groups (as indicated in the *Dictionary of Occupational Titles*), and specialization such as Communication Systems Clerks and Operators, Correspondence Clerks, Mail and Postal Clerks, Mail-preparing and Mail-handling Machine Operators, Messengers and Office Boys and Girls, Receptionists and Information Clerks, and other information communication occupations. (See also 03.06 00 00 00 *Business Communications* under BUSINESS.)

##### 14.04 01 00 00 Communication Systems Clerks and Operators

Programs concerned with operating telephone switchboards and similar equipment for relaying incoming and interoffice calls; establishing connections between subscribers, supplying information; calculating charges, and operating telegraph and similar equipment for transmitting and receiving messages. (D.O.T. Nos. 235. and 236. series)

##### 14.04 02 00 00 Correspondence Clerks

Programs concerned with composing correspondence and related items for the purpose of obtaining or giving information. (D.O.T. No. 204, series) (See also 03.06 02 00 00 *Report Writing* under BUSINESS.)

##### 14.04 03 00 00 Mail and Postal Clerks

Programs concerned with preparing incoming and outgoing mail for distribution, including time stamping, reading, sorting and delivery of incoming mail, and sealing and stamping outgoing mail or packages, selling postage stamps and postal cards; writing money orders, computing mail costs; sorting outgoing mail, and recording daily transactions. (D.O.T. Nos. 231. and 232. series)

##### 14.04 04 00 00 Mail - preparing and Mail - handling Machine Operators

Programs concerned with operating machines to print names, addresses, and similar information, on

## 14 OFFICE OCCUPATIONS (Continued)

items such as envelopes, accounting forms, and advertising literature; to address, fold, stuff, seal, and stamp mail, and to open envelopes. (D.O.T. No. 234. series)

### 14.04 05 00 00 Messengers and Office Boys and Girls

Programs concerned with running errands, sorting and delivering letters, packages, and messages, furnishing workers with clerical supplies, and performing similar routine tasks in an office. (D.O.T. No. 230. series)

### 14.04 06 00 00 Receptionists and Information Clerks

Programs concerned with meeting the public through (1) answering telephone and information requests, (2) locating officers and employees, and (3) keeping records of callers, making appointments, and interviewing people to secure required data, e.g., hospital admittance data, insurance data, and similar information. (D.O.T. No. 237. series)

### 14.04 99 00 00 Other Information Communication Occupations

Programs concerned with information communication occupations emphasized in instruction which are not classified above, including emerging occupations. (D.O.T. Nos. 239. and 249. series) (Specify.)

### 14.05 00 00 00 MATERIALS SUPPORT OCCUPATIONS: TRANSPORTING, STORING, AND RECORDING

Planned learning activities which include a combination of courses and practical experiences concerned with (1) receiving, storing, issuing, shipping, requisitioning, and accounting for stores of material or material in use; (2) assigning locations and space to items, including verification of quality, identification, condition, and value, (3) preparing or committing stocks for shipment; (4) inventorying stock; (5) replenishing depleted items, and (6) filling orders, and issuing tools, equipment, or materials to workers. Career objectives are identified with a variety of occupational groups and specializations (as indicated in the *Dictionary of Occupational Titles*), such as Planning and Production Clerks, Shipping and Receiving Clerks, Stock and Inventory Clerks, Traffic, Rate, and Transportation Clerks, and other transporting, storing, and recording occupations. (See also

03.09 00 00 00 *Business Law*, 03.12 00 00 00 *Business Statistics*, and 03.26 01 00 00 *Business Principles* under BUSINESS.)

### 14.05 01 00 00 Planning and Production Clerks

Programs concerned with routing parts for fabricating operations or repairs, developing work plans prior to production, scheduling work for and delivering parts to avoid overproduction, compiling records and reports on the number and types of units produced, and scheduling shipment of parts. (D.O.T. No. 221. series)

### 14.05 02 00 00 Quality Control Clerks

Programs concerned with verification of quality and quantity specifications. (D.O.T. No. 168. series)

### 14.05 03 00 00 Shipping and Receiving Clerks

Programs concerned with assembling, packing, addressing, stamping or receiving, unpacking, verifying, and recording incoming merchandise or materials. (D.O.T. No. 222. series)

### 14.05 04 00 00 Stock and Inventory Clerks

Programs concerned with receiving, storing, shipping, and issuing supplies, materials, and equipment in a stockroom or warehouse environment, including taking inventories, keeping records, and requisitioning stock. (D.O.T. No. 223. series)

### 14.05 05 00 00 Traffic, Rate, and Transportation Clerks

Programs concerned with calculating fares for carriers from rate tables. Included are the study of maps to select or lay out and measure travel routes, considering type of vehicle, distance, destination, and passenger or rate service, the preparation of written reports or informing customers orally, and computing schedules and cost factors. (D.O.T. Nos. 222. and 919. series)

### 14.05 99 00 00 Other Materials Support Occupations. Transporting, Storing and Recording

Programs concerned with receiving, storing, issuing, shipping, requisitioning and accounting for stores of materials emphasized in instruction which are not classified above, including emerging occupations. (D.O.T. Nos. 224., 229., and 919. series) (Specify.)

### 14.06 00 00 00 PERSONNEL, TRAINING, AND RELATED OCCUPATIONS

Planned learning experiences which include a

combination of courses and practical experiences concerned with personnel administration of an organization and the facilitating functions of scheduling and conducting clerical work and management and operations of organizations. Career objectives are identified with a variety of occupational groups and specialization (as indicated in the *Dictionary of Occupational Titles*), such as *Educational and Training Assistants, Interviewers and Tests Technicians, Personnel Assistants*, and other personnel, training, and related occupations. (See also 03.11 00 00 00 *Business Psychology* and 03.26 03 00 00 *Labor Management Relations* under BUSINESS.)

#### 14.06 01 00 00 Educational Assistants and Training Specialists

Programs concerned with the training of personnel in the facilitating functions of an organization, dealing with personnel such as teacher aides in education, training specialists in industry, and others. (D.O.T. No. 166. series)

#### 14.06 02 00 00 Interviewers and Test Technicians

Programs concerned with interviewing and administering tests to individuals to determine their appropriateness for employment and/or advancement. Also involved are the uses of appropriate measuring devices, and the administration, scoring, and analysis of individual and group progress. (D.O.T. Nos. 166. and 249. series)

#### 14.06 03 00 00 Personnel Assistants

Programs concerned with formulating policies relating to the personnel administration of an organization. Emphasized are the conduct of programs of recruitment, selection, training, promotion, welfare, safety, compensation, separation of employees, and recreation involving personnel. A practical background in psychology is required for some occupations in personnel research, and in the administration of testing and counseling programs. (D.O.T. Nos. 166. and 205. series)

#### 14.06 99 00 00 Other Personnel, Training, and Related Occupations

Programs concerned with personnel, training, and related occupations emphasized in instruction which are not classified above, including emerging occupations. (D.O.T. Nos. 166., 205., and 249. series) (Specify.)

#### 14.07 00 00 00 STENOGRAPHIC, SECRETARIAL, AND RELATED OCCUPATIONS

Planned learning activities which include a combination of courses and practical experiences concerned with making, classifying, and filing records, including written communications. Career objectives are identified with a variety of occupational groups and specialization (as indicated in the *Dictionary of Occupational Titles*), such as *Executive Administrative Secretary, Secretaries, Stenographers*, and other stenographic, secretarial, and related occupations. (See also 03.06 00 00 00 *Business Communications*, 03.28 00.00 00 *Office Practice*, and the category 03.34 00 00 00 *Shorthand, Stenographic, and Secretarial* under BUSINESS.)

#### 14.07 01 00 00 Executive Secretary

Programs concerned with secretarial coordinating, expediting, and facilitating functions of the office for aiding the executive under his direction and in a confidential relationship. (See also 14.08 01 00 00 *Administrative Assistants* under *Supervisory and Administrative Management Occupations*.)

#### 14.07 02 00 00 Secretaries

Programs related to occupations concerned with carrying out administrative and general office duties in addition to taking and transcribing dictation. (D.O.T. No. 201. series)

#### 14.07 03 00 00 Stenographers

Programs concerned with taking shorthand or special writing of notes by hand or machine and transcribing them. (D.O.T. No. 202. series)

#### 14.07 99 00 00 Other Stenographic, Secretarial, and Related Occupations

Programs concerned with stenographic, secretarial, and related occupations emphasized in instruction which are not classified above, including emerging occupations. (D.O.T. No. 209. series)

#### 14.08 00 00 00 SUPERVISORY AND ADMINISTRATIVE MANAGEMENT OCCUPATIONS

Learning activities and experiences concerned with various responsibilities such as (1) studying policies, organizational structures, and administrative practices of such organizations as governmental units, industrial firms, and nonprofit groups; (2) reviewing periodic budgets submitted by operations personnel; (3) pre-

## 14 OFFICE OCCUPATIONS (Continued)

paring reports summarizing findings and recommending changes in policy, organization, and administration to line management; (4) consolidating the budget estimates and preparing financial reports for consideration and action by upper echelons of management, and (5) supervising and coordinating activities, determining work procedures, and assigning duties. (See also the category 03.01.00.00.00 *Accounting*, the items 03.04.00.00.00 *Budget Control*, 03.06.00.00.00 *Business Communications*, 03.08.00.00.00 *Business Finance*, 03.09.00.00.00 *Business Law*; 03.12.00.00.00 *Business Statistics*, and the category 03.26.00.00.00 *Business and Management Principles* under BUSINESS.)

### 14.08 01 00 00 Administrative Assistants

Programs concerned with the coordinating, expediting, and facilitating functions of the office for aiding the executive, under his direction and in a confidential relationship, in the discharge of his duties as related to personnel, the budget, records control, housekeeping, making studies, conducting analyses, reviewing reports, and other responsibilities. (D.O.T. No. 169, series) (See also 03.01.12.00.00 *Secretarial Accounting* under BUSINESS and 14.07.01.00.00 *Executive Secretary*.)

### 14.08 02 00 00 Budget Management Analysts

Programs concerned with examining, analyzing, and interpreting accounting records, and with the study of policies, organization structures, and administrative practices of organizations. (D.O.T. No. 161, series)

### 14.08 03 00 00 Clerical Office Supervisors

Programs concerned with supervisory occupations involving the facilitating function of an organization rather than a scientific, technical, or administrative specialty. (D.O.T. Nos. 160-169, series)

### 14.08 04 00 00 Data-methods and Systems-procedures Analysts

Programs concerned with studying policies, organizational structures, and administrative practices of an organization for the purpose of recommending and installing systems procedures and methods improvements. (D.O.T. 012, series)

### 14.08 05 00 00 Office Management and Chief Clerks

Programs concerned with the facilitating func-

tion of the office involving supervision of the budget and management analysis staff of an office, scheduling and conducting work, and other administrative specializations. (D.O.T. No. 169, series)

### 14.08 99 00 00 Other Supervisory and Administrative Management Occupations

Programs concerned with supervisory and administrative management occupations emphasized in instruction which are not classified above including emerging occupations. (D.O.T. Nos. 160,-169., 188., and 189, series) (Specify.)

## 14.09 00 00 00 TYPING AND RELATED OCCUPATIONS

Planned learning activities which include a combination of courses and practical experiences concerned with recording data by means of typewriters and similar devices. Career objectives are identified with a variety of occupational groups and specialization-(as indicated in the *Dictionary of Occupational Titles*), such as Clerk Typists, Key Punch and Coding Equipment Operators, Typists, and other typing and related occupations. (See also 03.06.00.00.00 *Business Communications* and the category 03.35.00.00.00 *Typewriting* under BUSINESS.)

### 14.09 01 00 00 Clerk Typists

Programs concerned with the performance of general clerical work requiring the use of a typewriter in a majority of the duties, including compiling and typing reports, bills, application forms, shipping tickets, and other data from clerical records. These activities also include the filing of records and reports, posting information to records, sorting and distributing mail, answering telephones, computing using adding machines, and other similar duties. (D.O.T. No. 209, series)

### 14.09 02 00 00 Typists

Programs concerned with recording data by means of a typewriter or similar device. (D.O.T. No. 203, series) (See also 03.35.02.00.00 *Production Typewriting*, 03.35.03.00.00 *Typewriting, First Course*, and 03.35.04.00.00 *Typewriting, Second Course*, under BUSINESS.)

### 14.09 99 00 00 Other Typing and Related Occupations

Programs concerned with typing and related occupations emphasized in instruction which are not classified above, including emerging occupations. (Specify and list D.O.T. Nos. 209, and 219, series)

## 14.99 00 00 00 OTHER OFFICE OCCUPATIONS

Include here other planned learning experiences emphasized in new or emerging office occupations not listed or classifiable in one of the above major categories. (Specify and list D.O.T. Nos.)

## SOCIAL SCIENCES/SOCIAL STUDIES

### 15.00 00 00 00

The social sciences/social studies are comprised of interrelated subject matter organized to impart knowledge, develop skills, and identify goals concerning elements and institutions of human society in the disciplines of history, economics, political science, sociology, anthropology, psychology, geography, and philosophy.

The *social studies* are comprised of those aspects of the above which in practice are selected for instructional purposes in schools and colleges. Social studies are usually socially oriented with regard to aims and subject matter concerning the elements and institutions of human society.

Employing systematic, analytical, and theoretical methods, the *social sciences* include modes of inquiry such as historical or genetic approaches, survey research, experimentation, content analysis, and logical analysis. Illustrative methods or techniques include field studies, case studies, statistical analysis, map and photo interpretations, simulation, participant observation, polling, questionnaires, and others.

The Ad Hoc Committee for Social Sciences/Social Studies applied the following rationale to the selection of substantive content for placement in the Social Sciences/Social Studies area: (1) the items selected and classified were determined by the committee as representing the subject matter most commonly taught in this area in the United States, (2) the various aspects of subject matter were identified by titles which were considered as being most commonly used, and (3) the items included in the classification could be defined in brief form using only salient descriptive elements.

Opportunities are frequently provided both during and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of the social sciences/social studies as an integral part of the instructional program. As an example, the International Relations Club provides additional opportunities to pursue personal interests, apply various acquired skills such as research, and increase knowledge in selected aspects of the social sciences/social studies, and develop leadership qualities through club activities.

Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146; and they are described more fully in this chapter beginning on page 242. As an illustration, the International Relations Club is identified for reporting purposes under Cocurricular Activities as Item 20.01 16 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series - Evaluation and Curriculum Improvement on pages 71-78, and the items classified in the X 32 00. Series - School Services Supporting Instruction on pages 90-96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included in this subject-matter area are the items of information which identify various subjects in the social sciences/social studies.

### 15.01 00 00 00 ANTHROPOLOGY

The study of man and his works in which attention is focused on the relation between man and culture in the past and present, and on man's ongoing cultural development and the varieties of human, physical, social, and cultural forms. Anthropology is organized under such descriptive titles as Archaeology, Cultural Anthropology, Ethnology, and Physical Anthropology.

#### 15.01 01 00 00 Archaeology

The study of human history from the remains of past cultures.

#### 15.01 02 00 00 Cultural (Social) Anthropology

The comparative study of the culture of societies throughout the world, over time, with emphasis on learned and shared behavior. The following topics frequently are included for study:

#### 15.01 02 01 00

Acculturation

#### 15.01 02 02 00

American Indians

#### 15.01 02 03 00

Community Development

#### 15.01 02 04 00

Culture

14 SOCIAL SCIENCES/SOCIAL STUDIES--  
(Continued)

- 15.01 02 05 00  
Cultural Change
- 15.01 02 06 00  
Cultural Evolution
- 15.01 02 07 00  
Cultural Psychology
- 15.01 02 08 00  
Cultural Transmission
- 15.01 02 09 00  
Cultural Values
- 15.01 02 10 00  
Folk Societies
- 15.01 02 11 00  
Kinship Systems
- 15.01 02 12 00  
Peasant Societies
- 15.01 02 13 00  
Personality and Culture
- 15.01 02 14 00  
Prehistoric People
- 15.01 02 15 00  
Primitive Peoples, e.g., Bushmen, Eskimos
- 15.01 02 16 00  
Race
- 15.01 02 17 00  
Social, Political, Economic Organization
- 15.01 02 99 00 Other Topics in Cultural (Social)  
Anthropology  
Include here other topics emphasized in  
cultural anthropology which are not listed above.  
(Specify.)
- 15.01 03 00 00 Ethnography  
Subject matter and activity concerned with the  
procedure for studying customary behavior collecting  
data on living creatures and describing them.

- 15.01 04 00 00 Ethnology  
The study of relationships between or among  
cultural traditions, culture areas, and cultures.
- 15.01 05 00 00 Ethnoscience  
The study of native systems of description and  
classification of cultures.
- 15.01 06 00 00 Physical Anthropology  
The study of man's physical characteristics, his  
biological history, and present varieties. Topics fre-  
quently studied include the following:
- 15.01 06 01 00  
Evolution
- 15.01 06 02 00  
Prehistoric People
- 15.01 06 03 00  
Primitive Behavior
- 15.01 06 04 00  
Primitive Peoples, e.g., Bushmen, Eskimos
- 15.01 06 05 00  
Race
- 15.01 06 99 00 Other Topics in Physical Anthro-  
pology  
Include here other topics emphasized in  
physical anthropology which are not listed above.  
(Specify.)
- 15.01 99 00 00 Other Anthropology  
Include here other subject matter emphasized in  
anthropology which is not classifiable above. (Specify.)
- 15.02 00 00 00 AREA STUDIES (MULTIDISCIP-  
LINARY)  
Studies of slected areas which vary in scale from the  
small area, such as the neighborhood, to a large  
continental area such as South America. They may be  
defined in terms of political boundaries, geographic  
area, or cultural characteristics.  
The term "area studies" usually connotes the  
interdisciplinary approach, from the more simple  
geography-history interpretation-to the complex  
cultural interpretation involving anthropology,  
sociology, economics, political science, and other  
related areas. Area studies frequently are grouped  
as follows:

15.02 01 00 00 Areas Beyond the United States:

15.02 01 01 00  
Africa

15.02 01 02 00  
Asia

15.02 01 03 00  
Australia

15.02 01 04 00  
Canada

15.02 01 05 00  
Europe

15.02 01 06 00  
Latin America

15.02 01 07 00  
Middle East

15.02 01 08 00  
Soviet

15.02 01 99 00 Other Areas Beyond the United States

Include here other areas beyond the United States emphasized in instruction which are not listed above. (Specify.)

15.02 02 00 00 Regions of the United States:

15.02 02 01 00  
Midwest

15.02 02 02 00  
North Central

15.02 02 03 00  
Northeast

15.02 02 04 00  
Northwest

15.02 02 05 00  
Southeast

15.02 02 06 00  
Southwest

15.02 02 99 00 Other Regions of the United States  
Include here other regions of the United States emphasized in instruction which are not listed above. (Specify.)

15.02 03 00 00 Small Areas:

15.02 03 01 00  
Home State

15.02 03 02 00  
Local Community

15.02 03 03 00  
School Community

15.02 03 04 00  
Classroom Community

15.02 03 05 00  
Neighborhood

15.02 03 99 00 Other Small Areas  
Include here other small areas emphasized in instruction which are not listed above. (Specify.)

15.02 99 00 00 Other Area Studies  
Include here other area studies emphasized in instruction which are not listed or classifiable above. (Specify.)

### 15.03 00.00 00 CITIZENSHIP EDUCATION

The study of those portions of the social sciences/ social studies, and cocurricular activities, which contribute to the development of understanding and attitudes conducive to effective participation in civic affairs.

### 15.04 00 00 00 CONSERVATION-ENVIRONMENTAL EDUCATION

The study of related problems and promises of the new technologies concerned with natural resources and their utilization. Emphasis in instruction is on developing understanding and appreciation of one's natural heritage and responsibilities. (See also Major Aspects of the Biological Sciences, 13.02 00 09 00 *Conservation (Environment)*, under NATURAL SCIENCES.)

### 15.05 00 00 00 CONSUMER EDUCATION

The study concerned with the development of knowledge, understanding, appreciations, and skills



#### 14 SOCIAL SCIENCES/SOCIAL STUDIES - (Continued)

involved in the economic welfare of the consumer and consumer groups in everyday life, e.g., competency in managing money, purchasing and using goods and services, banking, investments, credit, consumer legislation, evaluation of consumer research and product-testing, and the role of the consumer in the economy. (Included as 03.15 00 00 00 *Consumer Education* under BUSINESS and 09.01 04 00 00 *Consumer Education* under HOME ECONOMICS.)

#### 15.06 00 00 00 ECONOMICS

The study of man's use of limited resources to satisfy his wants resources transformed by production into goods and services which, upon distribution, are transformed by consumption to yield the satisfaction of wants. The study of economics includes the analysis of the implications of alternative choices in the allocation of resources. (Included as 03.18 00 00 00 *Economics* under BUSINESS) Subject matter in economics is organized under various descriptive titles such as the following.

#### 15.06 01 00 00 Business and Industry Economics

The study of how the business firm is organized and combines resources to produce goods and services, taking account of costs, prices, profits, and the nature and extent of competition in markets.

#### 15.06 02 00 00 Comparative Economics

The study of (a) comparative economic systems differences among economies in their arrangements for the production, distribution, and consumption of goods and services, (b) comparative economic thought, differences among economic explanation of the production, distribution, and consumption of goods and services, and (c) economic development the evolution of economics toward industrialism, the growth of the world economy, and the growth of international trade.

#### 15.06 03 00 00 Consumer Economics

The study of the problems in consuming the production of the economy as seen from the behavior of the individual consumer and the aggregate of consumers which is the consumer sector of the economy. (Included as 03.18 01 00 00 *Consumer Economics* under BUSINESS.) (See also 04.00 00 89 00 *Economics of Consumption* under DISTRIBUTIVE EDUCATION.)

#### 15.06 04 00 00 History of Economic Thought

The study of changes in the explanations of

how economic systems have answered the questions. What shall be produced? How shall it be produced? For whom shall it be produced?

#### 15.06 05 00 00 Money and Banking

The study of the influence upon economic activity of the quantity of money and credit and its cost (interest rates). (Included as 03.18 03 00 00 *Money and Banking* under BUSINESS.)

#### 15.06 06 00 00 National Income (and components thereof)

The study of the explanation of level, growth, stability, and composition of a nation's or region's income, including the influence of taxing, borrowing, and spending at Federal, State, and local levels.

#### 15.06 07 00 00 Principles of Economics

Commonly included for study in a survey course in economics entitled "Principles of Economics" are the kinds of applications considered in the various types of economics described elsewhere in these pages. (Included as 03.18 04 00 00 *Principles of Economics* under BUSINESS.)

#### 15.06 08 00 00 Resource Economics

The study of the employment of (a) the labor resource, its wages, employment conditions, and organization into unions; (b) capital resources, that is, the manmade instruments of production; and (c) natural resources such as land, mineral wealth and water. (Included as 03.18 02 00 00 *Labor Economics* under BUSINESS.)

#### 15.06 99 00 00 Other Economics

Include here other organized subject matter emphasized in economics which is not listed above, e.g., mathematical economics, economic theory, institutional economics, economic statistics, and operations research. (Specify.)

#### 15.07 00 00 00 GEOGRAPHY

The study of spatial relations and spatial processes on the earth's surface, studied on a variety of scales ranging from local to worldwide. Included are both empirical and theoretical approaches to an understanding of (a) the spatial relations and processes of physical, biotic, and human phenomena considered separately or in varying combinations, and (b) spatial relations and processes in the abstract. An understanding of these spatial relations and processes and their significance to human activities encourages analysis of why things are when they are. Subject matter in geography is organized under various descriptive titles, including the following:

15.07 01 00 00 Historical Geography

The study of the geographies of the past. It is concerned with the reconstruction of the geography of a past period. Thus, an historical geography of any region is theoretically possible for every period of history.

15.07 02 00 00 Human (Cultural) Geography

The geographical study of man and his economic, social, and political activities as they are distributed over the earth. (Comprises a portion of the definition of 03.19 00 00 00 *Economic Geography* under BUSINESS.) The following considerations are frequently included for study:

15.07 02 01 00

Cartographic Interpretation

15.07 02 02 00

Circulation Patterns

15.07 02 03 00

Economic Patterns

15.07 02 04 00

Political Patterns

15.07 02 05 00

Population

15.07 02 06 00

Settlement Patterns

15.07 02 99 00 Other Human Geography

Include here other human geography emphasized in instruction which is not listed above. (Specify.)

15.07 03 00 00 Physical Geography

The study of that branch of geography which deals with the distribution and interrelationships of the physical and biotic features of the earth's surface: landforms, soils, climates, water (both surface and subsurface), minerals, and wild plant and animal life. Concerned exclusively with man's physical and biotic habitat, physical geography can properly be regarded as a natural science and is frequently included in science education drawing on earth science for subject matter. In practice, the following major aspects of physical geography frequently are included for study

15.07 03 01 00

Atmosphere: weather, climate

15.07 03 02 00

Biosphere: wild plants, wild animals

15.07 03 03 00

Exosphere, e.g., remote sensing

15.07 03 04 00

Hydrosphere: oceans, other surface water bodies, subsurface water, land ice

15.07 03 05 00

Lithosphere: land forms, minerals, soils

15.07 03 99 00 Other Aspects of Physical Geography

Include here other aspects of physical geography emphasized in instruction which are not listed above. (Specify.)

15.07 04 00 00 Regional Geography

The study of regions, a region being an area of any size that is homogeneous with respect to specific criteria. (Comprises a portion of the definition of 03.19 00 00 00 *Economic Geography* under BUSINESS.) In practice, regional geography comprises a wide variety of studies—physical, biotic, and human—such as the following

15.07 04 01 00

Agricultural Regions, such as dairy belt or corn belt

15.07 04 02 00

Climatic Regions, such as rainy tropics or arid lands, or hot and cold regions

15.07 04 03 00

Continental Regions, such as North America

15.07 04 04 00

Culture Regions, such as Latin America

15.07 04 05 00

Landform Regions, such as mountain areas

15.07 04 06 00

Manufacturing Regions, such as the Anglo-American Manufacturing Belt

15.07 04 07 00

Political Regions, such as an individual State, a group of states, or a nation

## 15 SOCIAL SCIENCES/SOCIAL STUDIES— (Continued)

15.07 04 08 00

Population (Human) Regions

15.07 04 09 00

Vegetation Regions, such as steppe or savanna areas.

15.07 04 95 00 Other Regional Geography

Include here other regional geography emphasized in instruction which is not listed above. (Specify.)

15.07 99 00 00 Other Geography

Include here other organized subject matter emphasized in geography which is not listed or classifiable above. (Specify.)

### 15.08 00 00 00 HISTORY

The study of man's past considered in terms of what has been interpreted about change or process. The conventional categories of inquiry are: political history, economic history, social history, and intellectual history. Consideration is also given to how historians proceed by gathering, criticizing, synthesizing, and interpreting evidence concerning accessible and relevant periods of the past. The subject matter of history is organized under various descriptive titles such as follows.

15.08 01 00 00 American History (including Canada, Latin America, and the United States)

The study of the history of selected events, individuals, groups, institutions, artifacts, ideas, and other phenomena associated with the western hemisphere. American history considers, e.g., pre-Columbian cultures, European discovery and exploration, colonial society, growth of independent nations, and inter-American relations.

15.08 02 00 00 Local History

The study of the history of selected events, individuals, groups, institutions, artifacts, ideas, and other phenomena associated with localities. Local history considers, e.g., settlement, growth of the economy, ethnic influences, and cultural development.

15.08 03 00 00 Modern History

The study of the history of selected events,

individuals, groups, institutions, artifacts, ideas, and other phenomena associated with the period of modernity (since approximately 1500 A.D.) Modern history considers, e.g., the expansion of Europe, the impact of romantic thought, the industrial revolution, and anticolonialism in Africa and Asia.

15.08 04 00 00 State History

The study of the history of selected events, individuals, groups, institutions, artifacts, ideas, and other phenomena associated with individual American States. State history considers, e.g., exploration, constitutional evolution, development of transportation and communication, and military contribution.

15.08 05 00 00 United States History

The study of the history of selected events, individuals, groups (e.g., racial, religious, ethnic), institutions, artifacts, ideas, and other phenomena associated with the United States. United States history considers, e.g., colonial society, the westward movement, the Civil War, and America's emergence as a great power.

15.08 06 00 00 Western Civilization

The study of the history of selected events, individuals, groups, institutions, artifacts, ideas, and other phenomena associated with the western world. Western civilization considers, e.g., rise and fall of the Roman Empire, the Renaissance and Reformation, the rise of the nation State, and the secularization of society.

15.08 07 00 00 Nonwestern Civilization

The study of the history of selected events, individuals, groups, institutions, artifacts, ideas, and other phenomena associated with the nonwestern world (Asia and Africa). Nonwestern civilization considers, e.g., the development of Chinese thought, imperial enterprise in Africa, social revolution in Southeast Asia, and diffusion of western ideas.

15.08 08 00 00 World Civilization

The study of the history of selected events, individuals, groups, institutions, artifacts, ideas, and other phenomena associated with the entire world, usually taught in junior colleges with an emphasis on social and intellectual changes rather than political changes. World civilization considers, e.g., the emergence of Greek philosophy, the proliferation of Christianity, and the integration of the international community.

#### 15.08 09 00 00 World History

The study of the history of selected events, individuals, groups, institutions, artifacts, ideas, and other phenomena associated with the entire world. World history considers, e.g., emergence of prehistoric man and society, the Roman conquests, the westernization of Asia, and the impact of technology since 1500 A.D.

#### 15.08 99 00 00 Other History

Include here other subject matter emphasized in history which is not listed above, e.g., ancient history, history of Latin America, history of democratic thought, and history of religion. (Specify.)

#### 15.09 00 00 00 HUMANITIES

The study of a group of related subjects such as literature, art, music, religion, history, philosophy, and classical and modern languages—with aspects of social sciences/social studies usually forming the core—concerned with man's individual cultural achievements and values in society as distinguished from social institutions and customs of the natural world. Sometimes aspects of the various subject-matter areas are taught separately but relatedly; in other instances these aspects of subject-matter areas are fused or integrated. (See also 02.01 03 00 00 *Humanities* under ART, 05.03 69 00 00 *Humanities* under ENGLISH LANGUAGE ARTS, 06.03 00 00 00 *Humanities* under FOREIGN LANGUAGES, and 12.06 00 00 00 *Humanities* under MUSIC.)

#### 15.10 00 00 00 PHILOSOPHY

A systematically organized body of knowledge concerned with the investigation and study of human nature and conduct as conceived and interpreted in terms of facts and principles of reality. Usually, the substance of philosophy includes aspects of esthetics, ethics, logic, metaphysics, and the theory of knowledge. The subject matter of philosophy is organized under various descriptive titles such as those which follow:

##### 15.10 01 00 00 Ethics

The study and critical examination of morals, the meaning of "good," the nature of moral judgment, and the justification of conduct in terms of what is considered right and proper standards of behavior. Considerations are given to the theoretical problems involved in ethics and the development of understanding which enable pupils to establish personal views concerning moral phenomena.

##### 15.10 02 00 00 History of Philosophy

The study of selected philosophers and areas of scholarship in philosophy from the pre-Socratic era to the present.

##### 15.10 03 00 00 Introduction of Philosophy

The study of the major philosophical problems, issues, and conflicts as treated by classical and modern philosophers. The theory of knowledge, facts and principles of reality and of human nature and behavior, and the implications of morality, science, and religion in everyday life are among the assumptions and issues frequently examined.

##### 15.10 04 00 00 Logic

The study of the scientific principles of formal reasoning and criteria governing validity in thinking. Attention may be given to a wide range of considerations, such as application of logic and rhetoric to everyday situations, symbolic logic, semantics, processes of argument, inconsistency, methods of investigation, and propositions and inferential interrelationships. (See also 15.04 01 01 00 *Logic* under ENGLISH LANGUAGE ARTS.)

##### 15.10 05 00 00 Metaphysics

The study of the science of reality—of being. The nature of mind and of space and of time, the principles and causes of things, and the existence of universals are aspects of metaphysics which are frequently examined, as well as philosophical agreements and disagreements with these issues.

##### 15.10 06 00 00 Philosophy of Religion

The critical investigation and study of religious experiences, beliefs and statements, arguments about the existence of a deity or deities, and the evaluation of the historical derivation of a religion or religions.

##### 15.10 99 00 00 Other Philosophy

Include here other subject matter emphasized in philosophy which is not listed above. (Specify.)

#### 15.11 00 00 00 POLITICAL SCIENCE

The study of government(s) and political behavior. The subject matter provides pupils with insight into a variety of factors important to the study of governments and culture, and systems processes, policies, theories, goals and the relationships between governments. The subject matter of government is organized under various descriptive titles such as those which follow:

## 15 SOCIAL SCIENCES/SOCIAL STUDIES— (Continued)

### 15.11 01 00 00 American Government

The study of the structures and processes by which men govern themselves at the local, State, and national levels.

### 15.11 01 01 00 Constitution, The

The study of the legal framework under which the American political system operates.

### 15.11 01 02 00 Other American Government

Include here other subject matter emphasized in American government. (Specify.)

### 15.11 02 00 00 Comparative Systems

The study and comparative analysis of political institutions, processes, and behavior in various countries—developing and developed.

### 15.11 03 00 00 Contemporary World Affairs

The analysis of economic, sociological, political, legal, cultural, and other factors which influence the relations between nations.

### 15.11 04 00 00 International Relations

The study of agencies, operations, and principles involved in communication and interaction among nations, with emphasis typically given to relations among governments.

### 15.11 05 00 00 Political Parties and Public Opinion

The development, organization, and operation of political parties and pressure groups and the formulation and role of public opinion.

### 15.11 06 00 00 Political Socialization

The study of the ways in which society transmits political orientations, including knowledge, norms, and practices from one generation to the next.

### 15.11 07 00 00 Political Theory

The study of the major schools of political philosophy, including the development of modern methodological techniques relevant to political science.

### 15.11 99 00 00 Other Political Science

Include here other subject matter emphasized in political science which is not listed above. (Specify.)

## 15.12 00 00 00 PSYCHOLOGY

The study and systematic investigation of organisms, especially human beings, and their collective characteristics—their intelligence, feelings, and attitudes, and their behavior in relation to physical and social environment. The subject matter of psychology is organized under various descriptive titles such as those which follow:

### 15.12 01 00 00 Developmental Psychology

The investigation and study of those aspects of psychology concerned with the progressive development and behavior in childhood and adolescence. Frequently emphasized for study are: behavior and mental growth, the process of maturation, the concept of self, norms in behavior, social norms (relationship with people), heredity and environment and their interaction, parent-child relationships, and the effects of cultural and social forces upon attitudes and values.

### 15.12 02 00 00 Educational Psychology

The investigation and study of a variety of aspects of psychology and their applications to classroom situations. Among considerations frequently emphasized are the nature and theory of learning, child and adolescent development, emotion and adjustment, motivation, and individual and group differences.

### 15.12 03 00 00 General Psychology

The study of the fundamental principles of human behavior. Basic concepts, the scope of psychology, psychological methods, human behavior, animal behavior, motivation, thought processes, theory of learning, characteristics of emotions, and perception are frequently emphasized. Subject matter is usually designed for study in breadth rather than for the study of selected aspects of psychology in depth.

### 15.12 04 00 00 Psychology of Adjustment

The study of the individual in terms of total adjustment with major emphasis applied to social environment. Among factors frequently emphasized for study are adjustment techniques, personality as a construct, theories of personality, the nature of conflict and adjustment in personality, and physiological and social aspects of personality development.

### 15.12 05 00 00 Social Psychology

The study of the behavior of individuals and groups, of behavioral interactions, and of the influence of the group(s) on attitudes, emotions, and personality development. Among the aspects of social psychology

frequently emphasized for study are the adjustment of individuals to group situations, including family, school, and occupation; social foundations of attitudes and behavior—development and change; social judgments and perception; and psychological factors involved in race prejudice, war, and nationalism.

#### 15.12 99 00 00 Other Psychology

Include here other subject matter emphasized in psychology which is not listed above. (Specify.)

### 15.13 00 00 00 SOCIOLOGY

The study of human society, its structure and processes. It includes a wide range of societal relationships from the primary groups such as the family, the tribe, and the clan, to the complex groupings that characterize the megalopolis of urban society. Socialization, collective behavior, deviance from the group, culture, aspects of social status, and patterns of social change are among areas emphasized in subject matter. The subject matter of sociology is organized under various descriptive titles such as those which follow:

#### 15.13 01 00 00 Community

The study of the social organization of a cluster of family groups, in a given locality, that are linked by a consciousness of similarities in attitudes, values, and problems. Among major aspects of "community" which are investigated and studied are the following:

#### 15.13 01 01 00 Rural Society

A study of that portion of organized society living in rural areas, with emphasis on rural trends and problems.

#### 15.13 01 02 00 Urban Society

Applications of sociological principles to the study of customs and institutions in an urban setting, with emphasis on metropolitan trends and problems. Aspects of urban planning may be appropriately included for investigation and study.

#### 15.13 01 99 00 Other Community

Include here other organized subject matter concerning "community" and emphasized in instruction which is not listed above. (Specify.)

#### 15.13 02 00 00 Public Opinion and Political Sociology

The investigation and study of the development of sociological attitudes and behavior, including voting behavior, pressure groups, mass

communication, and detection and interpretation of propaganda.

#### 15.03 03 00 00 Socialization

The study of the problems and processes of man becoming a participating member of society.

#### 15.13 04 00 00 Social Organization

The study of the structure of groups, institutions, and agencies that comprise the structure of society. Among the groups, institutions, and agencies studied the following usually are included:

#### 15.13 04 01 00 Education

The study of schools and other educational agencies—their structure, role in the socialization process, and function in a dynamic society.

#### 15.13 04 02 00 Family

The study of the smallest group central to an organized society—its social, economic, and biological characteristics, functions, and problems.

#### 15.13 04 03 00 Religion

The study about religious organizations and churches and their functions in a dynamic contemporary society.

#### 15.13 04 99 00 Other Social Organization

Include here other subject matter emphasized in social organization which is not listed above. (Specify.)

#### 15.13 05 00 00 Social Problems

The study of problems of human groups. The subject matter may appropriately include the study of: (a) family disorganization; (b) population imbalances; (c) delinquency; (d) crime—causes, effects, and remedies related to the pathology of society that involves the maladjustments of the individual which bring him into conflict with society; (e) poverty; and (f) ethnic group conflicts.

#### 15.13 06 00 00 Social Stratification

The study of the hierarchical groups in society, such as classes and castes.

#### 15.13 07 00 00 Social Theory

The investigation and study of the concepts and propositions developed in the systematic analysis of the structural components of human society and their interaction.

## 15 SOCIAL SCIENCES/SOCIAL STUDIES-- (Continued)

### 15.13 99 00 00 Other Sociology

Include here other subject matter emphasized in sociology which is not listed or classifiable above. (Specify.)

### 15.99 00 00 00 OTHER SOCIAL SCIENCES/ SOCIAL STUDIES

Include here organized subject matter emphasized in social sciences/social studies which is not listed or classifiable above. (Specify.)

## TECHNICAL EDUCATION

### 16.00 00 00 00

Technical education is concerned with that body of knowledge organized in a planned sequence of classroom and laboratory experiences, usually at the post-secondary level, to prepare pupils for a cluster of job opportunities in a specialized field of technology. The program of instruction normally includes the study of the underlying sciences and supporting mathematics inherent in a technology, as well as methods, skills, materials, and processes commonly used and services performed in the technology. A planned sequence of study and extensive knowledge in a field of specialization is required in technical education, including competency in the basic communication skills and related general education. Technical education prepares for the occupational area between the skilled craftsman and the professional person such as the physician, the engineer, and the scientist.

The technical education curriculum is so structured that it prepares the graduate to enter a job and be productive with a minimum of additional training after employment. It is designed to provide a background of knowledge and skills which will enable an individual to advance with the developments in the technology, and enables him, with a reasonable amount of experience and additional education, to advance into positions of increased responsibility.

The technician frequently is employed in direct support of the professional employee. For example, the engineering technician will be capable of performing such duties as assisting in the following engineering functions: designing, developing, testing, modifying of products and processes, production planning, writing reports, and preparing estimates; analyzing and diagnosing technical problems that in-

volve independent decisions; and solving a wide range of technical problems by applying his background in the technical specialties—science, mathematics, and communicative and citizenship skills.

The Ad Hoc Committee for Technical Education applied the following rationale to the selection of substantive content for placement in the Technical Education area: (1) the items selected and classified were determined as representing the subject matter most commonly taught in technical education in the United States; (2) the various aspects of subject matter were identified by titles which were considered as being most commonly used; and (3) the various aspects of subject matter selected for placement under Technical Education could be defined in brief form using only salient descriptive elements.

Many items of information in chapter 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

### 16.01 00 00 00 ENGINEERING-RELATED TECH- NOLOGY

That part of the engineering field which requires the application of scientific and engineering knowledge and methods combined with technical skills necessary in the support of engineering activities. Persons prepared in this technology are a part of the engineering manpower team which includes the skilled craftsman, the technician, and the engineer, and work as technicians in close support of the engineer.

#### 16.01 01 00 00 Aeronautical Technology

A planned program of classroom and laboratory experiences, including mathematics, the physical sciences, and a combination of aerodynamics, structures, materials, and electronics as applied to the design, testing, and development of aircraft. This program is designed to produce the ability to understand the propulsion, control, and guidance system of the airplane, and to collect pertinent engineering data in a research-and-development activity. This program prepares the graduate to work in direct support of the engineer in the aerospace industry.

#### 16.01 02 00 00 Agricultural Technology

Specialized classroom and laboratory learning

experiences in physical sciences, mathematics, and specialty courses dealing with farm machinery, farm structures, and rural electrification, designed to prepare the graduate to work in direct support of the agricultural engineer.

16.01 02 01 00 Agricultural Electrification Technology

Specialized learning experiences in electrical systems as applied to planning, estimating, and designing to meet the needs of the customer. (See also 01.03 07 00 00 *Agricultural Electrification* under AGRICULTURE.)

16.01 02 02 00 Agricultural Machinery and Equipment Technology

Specialized learning experiences in properties of soils, characteristics of crop growth, and the development of knowledge and understanding concerning mechanisms, control systems, and materials-handling as applied to the design, development, testing, and manufacture of agricultural machinery and equipment. (See also 01.03 01 00 00 *Agricultural Power and Machinery* under AGRICULTURE.)

16.01 02 03 00 Agricultural Structures and Conveniences

Specialized learning experiences concerned with the strength of building materials and elementary structures as applied to planning, estimating, and designing to meet the needs of the customer. (See also 01.03 02 00 00 *Agricultural Structures and Conveniences* under AGRICULTURE.)

16.01 02 99 00 Other Agricultural Technology

Include here other organized subject matter and experiences emphasized in agricultural technology which are not listed above. (Specify.)

16.01 03 00 00 Architectural Technology (Building Construction)

A program of instruction designed to provide the pupil with knowledge and understanding of scientific principles, mathematical concepts, and communicative and technical skills combined with laboratory experiences including creative design, testing, and model building which will enable him to be supportive to the architect and the architectural engineer. The subject matter is concerned with design, estimating, inspection, supervision, and contracts and specifications—primarily in the field of building construction—with emphasis on the art of form.

16.01 04 00 00 Automotive Technology

A sequence of classroom and laboratory experiences, including the study of scientific and mathematical principles which lead to understanding of the design, development, and testing of internal combustion engines and related component parts of the motor vehicle, including transmission, electrical systems, and braking systems. This program is planned to prepare the graduate to perform duties concerned with designing, testing, and development in direct support of the automotive engineer.

16.01 05 00 00 Chemical Technology

A program of instruction designed to provide the pupil with knowledge of scientific principles, mathematical concepts, and communicative and technical skills combined with appropriate laboratory experiences which will enable him to be supportive to professional personnel in the chemical field. The subject matter emphasizes qualitative, quantitative, and analytical analyses in general and organic chemistry. In the unit-operation laboratory he studies material handling, crushing, grinding, and sizing. By pilot-plant operation he studies the machinery and methods used in extraction, distillation, evaporation, drying, absorption, and heat transfer in chemical technology. He designs, installs, and operates pilot plants for chemical manufacturing processes.

16.01 06 00 00 Civil Technology

A planned program of classroom and laboratory experiences including the study of physical sciences, mathematics, surveying, strength of materials, and other specialty courses leading to preparation for designing, testing, and supervising the construction of highways, railroads, airports, bridges, harbors, irrigation works, sanitary plants, and other structures. The graduate works in direct support of the civil engineer.

16.01 06 01 00 Roadway Technology

Specialized learning experiences designed to prepare personnel for duties such as surveying, designing routes, laying out roadways, testing materials, acquiring land and preparing plans and specifications for the construction of highways, railroads, and airports.

16.01 06 02 00 Sanitation Technology

Specialized learning experiences, including the study of biological sciences, planned for preparing personnel who will be involved in the design, construction, and operation of water systems, sewage disposal systems, and pollution control systems.



## 16 TECHNICAL EDUCATION--(Continued)

### 16.01 06 03 00 Structural Technology

Specialized learning experiences concerned with the preparation of personnel for duties such as structural detailing and design testing, building construction supervision, estimating, and specification writing.

### 16.01 06 99 00 Other Civil Technology

Include here other organized subject matter and experiences emphasized in civil technology which are not listed above. (Specify.)

### 16.01 07 00 00 Electrical Technology

An organization of subject matter and laboratory experiences designed to provide preparation in specialty courses, physical sciences, mathematics, and general education as applied to the design, development, and testing of electrical circuits, devices and systems for generating electricity, and the distribution and utilization of electrical power. These electrical systems incorporate, and require knowledge about, the application of electronic and instrumentation devices.

The program is designed to develop in the individual the capacity to perform in such areas as model and prototype development and testing, systems analysis and integration including design, selection, installation, calibration and testing, development of corrective and preventive maintenance techniques; application of engineering data; and the preparation of reports and test results in support of the electrical engineer.

### 16.01 08 00 00 Electronic Technology

Subject matter and laboratory experiences organized to provide preparation in the specialty courses, physical science, mathematics, and general education concerned with the design, development, modification, and testing of electronic circuits, devices and systems. Subject matter incorporates solid state and microminiaturization devices and representative systems such as microwave systems, computers, and controls.

The program is designed to develop in the individual the capacity to perform in such areas as practical circuit feasibility; prototype development and testing, development of maintenance techniques; systems analysis including design, selection, installation, calibration, and testing, and the application of engineering data and preparation of reports and test results in support of the professional personnel in the electronics field.

### 16.01 09 00 00 Electromechanical Technology

A selection and integration of specialized classroom and laboratory learning experiences in both the mechanical and electrical fields.

Instruction is planned to provide preparation for responsibilities concerned with the design, development, and testing of electromechanical devices and systems such as automatic control systems and servomechanisms, including vending machines, elevator controls, missile controls, tape-control machines, and auxiliary computer equipment.

The program of instruction is designed to develop understanding, knowledge, and skills, which will provide the capacity to perform effectively in such areas as feasibility testing of engineering concepts; systems analysis including design, selection, and testing; application of engineering data, and the preparation of written reports and test results in support of mechanical and electrical engineers.

### 16.01 10 00 00 Environmental-control Technology

Classroom and laboratory experiences designed to develop in the pupil knowledge and understanding concerned with the scientific principles and basic mathematics dealing with the control of temperature and quality of air, and the design, testing, installation, and development of heating and cooling systems. (See also 17.01 00 00 00 *Air Conditioning* under TRADE AND INDUSTRIAL OCCUPATIONS.)

### 16.01 10 01 00 Cooling

Specialized learning experiences concerned with cooling systems such as unit air conditioners and control systems. Instruction emphasizes design, development, and installation and their applications to cooling systems.

### 16.01 10 02 00 Heating

Specialized learning experiences concerned with heat generation systems such as oil burners, coal furnaces, and electrical heating units. Instruction emphasizes design, development, testing, and installation and their applications to heating systems.

### 16.01 10 03 00 Refrigeration

Specialized learning experiences concerned with such scientific principles as the laws of gases, the flow of fluids, and automatic control systems as applied to the temperature control of a particular environment, including food warehouses, cryogenic laboratories, and commercial food storage units.

16.01 10 99 00 Other Environmental-control Technology

Include here other organized subject matter and experiences emphasized in environmental-control technology which are not listed above. (Specify.)

16.01 11 00 00 Industrial Technology

A program of instruction designed to develop knowledge and understanding of scientific principles, mathematical concepts, and communicative and technical skills, combined with appropriate laboratory experiences which will prepare the pupil to be supportive to the industrial engineer in production and planning. The subject matter emphasizes the design and installation of integrated systems of materials, machinery, equipment, and personnel.

16.01 12 00 00 Instrumentation Technology

A sequence of classroom and laboratory experiences, supported by physical sciences and mathematics, concerned with providing an understanding in the fields of electricity, electronics, mechanics, pneumatics, and hydraulics as they pertain to applications of the principles of control and recording systems and automated devices. The instructional program is planned to prepare the pupil to design, develop prototypes, and test and evaluate control systems or automated systems and to prepare graphs, written reports and test results in support of the professional personnel working in the field of instrumentation.

16.01 13 00 00 Mechanical Technology

A program of instruction designed to develop knowledge and understanding concerning scientific principles, mathematical concepts, and communicative skills, combined with appropriate laboratory experiences which will prepare a pupil to become supportive to the mechanical engineer.

16.01 13 01 00 Energy Conversion

Specialized learning experiences designed to prepare personnel for duties in such fields as steam engineering, fuel and combustion analysis, steam and gas turbines, industrial power plant equipment, and internal combustion engines.

16.01 13 02 00 Machine and Tool Design

An organization of subject matter and experiences concerned with the preparation of drawings, specifications, calculations, and procedures emphasized in the design or redesign of parts, assemblies, tools, jigs, and fixtures, and the testing of the characteristics and performance of units and components.

16.01 13 03 00 Production

Specialized learning experiences designed to prepare personnel to perform duties in such areas of responsibility as process planning, machine selection, materials-handling, quality control, economics of production, inspection, and coordination between engineering design and production.

16.01 13 99 00 Other Mechanical Technology

Include here other organized subject matter and experiences emphasized in mechanical technology which are not listed above. (Specify.)

16.01 14 00 00 Metallurgical Technology

An organization of subject matter and laboratory experiences including specialty courses, physical sciences, mathematics, and general education concerned with the production, research, and/or quality control of metals. The instructional program is designed to prepare pupils for performing duties in such areas as: conducting tests on the properties of metals; pilot and production plant design and development; the development, operation, and alteration of test procedures and equipment; and the collection and analysis of data and preparation of comprehensive and detailed reports in support of professional personnel in the metallurgical field. (See also 17.24 00 00 00 *Metallurgy Occupations* under TRADE AND INDUSTRIAL OCCUPATIONS.)

16.01 15 00 00 Nuclear Technology

A combination of subject matter and laboratory experiences designed for the study of scientific principles, mathematical concepts, and communicative and technical skills which, when combined with appropriate laboratory situations, prepare the pupil to be supportive to professionals engaged in developing, manufacturing, testing, research, maintaining, storing, and handling materials in the nuclear science and energy field. The subject matter emphasizes nuclear physics, radioisotopes, chemistry, electronics, nuclear instrumentation, and safety procedures. Graduates may enter and develop in this field as reactor technicians, radiation safety technicians, and radioactive-materials technicians.

16.01 16 00 00 Petroleum Technology

A planned program of classroom and laboratory experiences which include mathematics, chemistry, physics, petrology, sedimentation, and geophysics as applied to the recovery and use of oil and gas. Instruction leads to preparation for: oil field explora-

## 16 TECHNICAL EDUCATION--(Continued)

tion; supervision of rig construction, drilling, oil field services, crude petroleum production, and petroleum refining; and work in direct support of the engineers and geologists in the oil industry.

### 16.01 17 00 00 Scientific Data Processing

A combination of subject matter and experiences, including scientific principles and mathematical concepts, combined with specialty courses and applied laboratory experiences necessary in preparing pupils to: convert scientific, engineering, and other technical problem formulations to processible forms by computer; resolve symbolic formulations; prepare logical flow charts and block diagrams; encode resolvent equations for processing by applying knowledge of advanced mathematics, such as differential equations and numerical analysis; and gain understanding of computer capabilities and limitations.

The program is designed to provide in the pupil the capacity to perform such functions as: consulting with engineering and other technical personnel to resolve problems of intent, inaccuracy, or feasibility of computer processing; observing the computer during testing or processing runs to analyze and correct programming and coding errors; reviewing results of computer runs for determining necessary modifications and reruns; developing new subroutines or the extension of the application of available programs; and the development of scientific machine languages to simplify programming statements and coding of future problems.

### 16.01 99 00 00 Other Engineering-related Technology

Include here other organized subject matter and experiences emphasized in engineering-related technology which are not classifiable or listed above, e.g., ceramics-engineering technology, marine-engineering technology, and mining-engineering technology. (Specify.)

### 16 02 00 00 00 AGRICULTURAL - RELATED TECHNOLOGY

That part of the agricultural field which requires the application of scientific knowledge and methods combined with technical skills in support of agricultural activities. Persons prepared in this technology are a part of the team which includes the skilled worker, the technician, and the scientists.

16.02 01 00 00 Animal Science  
(For description see 01.01 01 00 00 *Animal Science* under AGRICULTURE.)

16.02 02 00 00 Dairy Technology  
(For description see 01.01 01 00 00 *Animal Science* and 01.04 01 02 00 *Dairy Products* under AGRICULTURE.)

16.02 03 00 00 Food Processing Technology  
(For description see 01.04 01 00 00 *Food Products* under AGRICULTURE.)

16.02 04 00 00 Plant Science  
(For description see 01.01 02 00 00 *Plant Science* under AGRICULTURE.)

### 16.02 99 00 00 Other Agricultural-related Technology

Include here other organized subject matter and experiences, emphasized in agricultural-related technology which are not classifiable in the engineering-related technology category or are not listed in the above category. (Specify.)

### 16.03 00 00 00 HEALTH-RELATED TECHNOLOGY

That part of the health occupations field which requires the application of scientific knowledge and methods combined with technical skills in support of the health occupations. Persons prepared in this technology are a part of the health team which includes the skilled worker, the technician, and the dentist, medical doctor, and other professionals.

16.03 01 00 00 Dental Hygiene (Associate Degree)  
(For description see 07.01 02 00 00 *Dental Hygiene (Associate Degree)* under HEALTH OCCUPATIONS EDUCATION.)

16.03 02 00 00 Electroencephalograph Technician  
(For description see 07.09 01 00 00 *Electroencephalograph Technician* under HEALTH OCCUPATIONS EDUCATION.)

16.03 03 00 00 Medical Laboratory Assisting  
(For description see 07.02 03 00 00 *Medical Laboratory Assisting* under HEALTH OCCUPATIONS EDUCATION.)

16.03 04 00 00 Radiologic Technology (X-ray)  
(For description see 07.05 01 00 00 *Radio-*

*logic Technology (X-ray) under HEALTH OCCUPATIONS EDUCATION.)*

16.03 05 00 00 Nursing (Associate Degree)  
(For description see 07 03 01 00 00 *Nursing (Associate Degree)* under HEALTH OCCUPATIONS EDUCATION.)

16.03 99 00 00 Other Health-related Technology  
Include here other organized subject matter and experiences emphasized in health-related technology which are not listed above. (Specify.)

16.04 00 00 00 OFFICE-RELATED TECHNOLOGY  
That part of the office occupations field which requires the application of scientific knowledge and methods combined with technical skills in support of office occupations. Persons prepared in this technology are a part of the office team which includes the skilled worker, the technician, and administrative management personnel.

16.04 01 00 00 Computer Programmer  
(For description see 14.02 03 00 00 *Programmers* under OFFICE OCCUPATIONS.) (See also 03.17 04 00 00 *Computer Programming* under BUSINESS.)

16.04 02 00 00 Systems Analyst Technology  
(For description see 14.02 04 00 00 *Systems Analysts* under OFFICE OCCUPATIONS.)

16.04 99 00 00 Other Office-related Technology  
Include here other organized subject matter and experiences emphasized in office-related technology which are not classifiable in the engineering-related technology category or are not listed in the above category. (Specify.)

16.05 00 00 00 HOME ECONOMICS - RELATED TECHNOLOGY

That part of the home economics occupational field which requires the application of knowledge and methods combined with technical skills in support of activities concerned with children, food services, home furnishings, interior decorating, and related activities in the home economics field. Persons prepared in this technology are a part of the team which includes the skilled worker, the technician, and the professional.

16.05 01 00 00 Child Care Center Assistant  
(For description see 09.02 01 00 00 *Care and*

*Guidance of Children* under HOME ECONOMICS.)

16.05 02 00 00 Hospital Children's Division Assistant  
(For description see 09.02 01 00 00 *Care and Guidance of Children* under HOME ECONOMICS.)

16.05 03 00 00 Teacher's Assistant at the Primary Level  
(For description see 09.02 01 00 00 *Care and Guidance of Children* under HOME ECONOMICS.)

16.05 04 00 00 Food Service Supervisor  
(For description see 09.02 3 00 00 *Food Management, Production, and Services* under HOME ECONOMICS.)

16.05 05 00 00 Interior Decorator Assistant  
(For description see 09.02 04 00 00 *Home Furnishings, Equipment, and Services* under HOME ECONOMICS.)

16.05 06 00 00 Home Equipment Demonstrator  
(For description see 09.02 04 00 00 *Home Furnishings, Equipment, and Services* under HOME ECONOMICS.)

16.05 99 00 00 Other Home Economics-related Technology  
Include here other organized subject matter and experiences emphasized in home economics-related technology which are not listed above. (Specify.)

16.06 00 00 00 MISCELLANEOUS TECHNICAL EDUCATION

Examples of other organized technical education which may be classified in this category, are:

16.06 01 00 00 Commercial Pilot Training  
A program of classroom instruction and practical experience, including mathematics and the appropriate physical sciences, designed to prepare the student to pilot and eventually assume command responsibility for aircraft carrying passengers or freight. The program is planned to enable the student to acquire competency and knowledge in such fields as: aircraft structure, behavior, and operation; aircraft systems, instrumentation, and controls; radio communications as applied to aircraft; meteorology; navigation; airways safety and traffic regulations; and other aspects of a pilot's duties and responsibilities. The

## 16 TECHNICAL EDUCATION--(Continued)

student will be expected to become conversant with governmental rules and regulations pertaining to piloting aircraft and will be expected to pass any tests prescribed by the Federal Aviation Agency for a Commercial Pilot's Certificate upon satisfactory completion of the designated sequence of courses.

### 16.06 02 00 00 Fire and Fire Safety Technology

A planned sequence of classroom instruction (including the appropriate sciences such as chemistry) and practical experiences designed to prepare the student to function as a fire control and fire safety specialist. The program is planned to enable the student to acquire competency and knowledge in one or more of such diverse fields as structural design and materials, meteorological factors impinging upon fire situations, firefighting and control, wherein he inspects equipment and advises as to its proper usage based upon an understanding of the chemistry of combustion and the most modern techniques for coping with fires, the handling of hazardous materials (such as petroleum products, and other volatile, explosive, or corrosive materials) either routinely or in an accident situation, the inspection of public and private property to evaluate fire and fire safety conditions, wherein he makes recommendations for correction of unsafe conditions, advising local governments, private industries, and individual citizens concerning the prevention of accidents and fires, conducting educational activities, through regular school programs or special campaigns, to promote fire safety and the prevention of accidents and fires.

### 16.06 03 00 00 Forestry Technology

A sequence of classroom and laboratory experiences, including appropriate physical and biological sciences, designed to prepare the student to function as a technical specialist in the utilization of our timber resources. The program is planned to enable the student to acquire competency in one or more of such areas as: harvesting of timber, wherein he surveys timber lands, draws topographical maps, selects trees for cutting, and plans the transportation of logs to mill or loading sites; conducting or assisting in research involving the preparation of wood for commercial use, and the preservation and utilization of wood and its by-products; developing, improving, or determining methods of handling, curing, shaping, and treating wood in the course of manufacturing wooden products; investigating and assisting in setting up

chemical or mechanical processes for converting wood into various commodities, and testing wood for such properties as strength, elasticity, and endurance, and recommending proper utilization.

### 16.06 04 00 00 Oceanographic Technology (Physical, Biological, and Fisheries)

This item is not defined here because it is presently undergoing extensive study and development.

### 16.06 05 00 00 Police (Law Enforcement and Corrections) Science Technology

A planned sequence of classroom instruction and laboratory experiences designed to prepare a student to function as one or more of the following: (1) a generalist in any law enforcement agency concerned with patrol and investigative activities, traffic control, initial contact with the public such as obtaining information, preparing reports, and testifying in court; (2) an evidence technician operating in a crime laboratory or mobile unit concerned with the collection, preparation, and transportation of physical evidence including the use of skills in photography and report writing; and (3) a technician primarily concerned with delinquency or crime prevention who may be employed by a police agency, juvenile court, or correctional institution to (a) carry out responsibilities which may include investigation and referral of dependent-neglected children as well as delinquents and youthful offenders, (b) supervise persons on probation, or (c) provide rehabilitative services to offenders.

### 16.06 99 00 00 Other Miscellaneous Technical Education

Include here other aspects of technical education emphasized in instruction which are not listed in or appropriate to one of the above categories. (Specify.)

## TRADE AND INDUSTRIAL OCCUPATIONS

### 17.00 00 00 00

Trade and industrial occupations is the branch of vocational education which is concerned with preparing persons for initial employment, or for upgrading or retraining workers in a wide range of trade and industrial occupations. Such occupations are skilled or semiskilled and are concerned with layout designing, producing, processing, assembling, testing, maintaining, servicing, or repairing any product or commodity.

Instruction is provided (1) in basic manipulative skills, safety judgment, and related occupational information in mathematics, drafting, and science required to perform successfully in the occupation, and (2) through a combination of shop or laboratory experiences simulating those found in industry and classroom learning. Included is instruction for apprentices in apprenticeable occupations or for journeymen already engaged in a trade or industrial occupation. Also included is training for service and certain semiprofessional occupations considered to be trade and industrial in nature.

The *Ad Hoc* Committee for Trade and Industrial Occupations applied the following criteria to the selection of substantive content for placement in the subject-matter area. (1) the content was determined by consensus of the committee to be unique and appropriate to trade and industrial occupations; (2) subject-matter items could be defined in brief form using only salient descriptive elements, and (3) the various aspects of organized subject matter were identifiable by titles which the *ad hoc* committee considered to be most appropriate to trade and industrial occupations.

Opportunities are frequently provided both during the outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of trade and industrial occupations as an integral part of the instructional program. As an example, the Vocational Industrial Clubs of America provide additional opportunities to develop leadership, civic responsibilities, other qualities, and an understanding of the world of work in trade and industrial occupations. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. They may be designed for participation of pupils as individuals or in groups. A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146, and they are discussed more fully in this chapter beginning on page 242. As an illustration, the Vocational Industrial Clubs of America can be identified for reporting purposes and further described under Cocurricular Activities as Item 20 01 33 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00, Series Evaluation and Curriculum Improvement on page 71-78, and the items classified in the X 32 00, Series School Services Supporting Instruction on page 90-96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

## 17.01 00 00 00 AIR CONDITIONING

Classroom and shop experiences which enable the student to become proficient in the installation, repair, and maintenance of commercial, industrial, and domestic air conditioning systems. Included is instruction in the theory and application of basic principles involved in conditioning of air: cooling, heating, filtering, and controlling humidity; the operating characteristics of various units and parts; blueprint reading; the use of technical reference manuals; the diagnosis of malfunctions; the overhaul, repair, and adjustment of units and parts such as pumps, compressors, valves, springs, and connections; and the repair of electric and pneumatic control systems. (See also 16.01 10 00 00 *Environmental-control Technology* under TECHNICAL EDUCATION.)

### 17.01 01 00 00 Cooling

Learning experiences specifically concerned with the installation, operation, testing, and troubleshooting of various types of air cooling equipment, including the controls needed for operation.

### 17.01 02 00 00 Heating

Learning experiences specifically concerned with the installation, operation, testing, and troubleshooting of various types of heating equipment, including the controls needed for operation.

### 17.01 03 00 00 Ventilating (Filtering and Humidification)

Learning experiences specifically concerned with the installation, operation, testing, and troubleshooting of various air quality control equipment such as humidifiers, filters, fans, and related equipment.

### 17.01 99 00 00 Other Air Conditioning

Include here other specialized subject matter and learning experiences emphasized in air conditioning, refrigeration, and heating which are not listed above. (Specify.)

## 17.02 00 00 00 APPLIANCE REPAIR

Classroom and shop experiences concerned with the theory of electrical circuitry, simple gearing, linkages, and lubrication in the operation, maintenance, and repair of components including relays, time switches, pumps, and agitators used in appliances such as washers, dryers, vacuum cleaners, toasters, water heaters, and stoves. Related training is provided in the uses of familiar tools, test equipment, and service manuals, and in making cash estimates for repairs.

## 17 TRADE AND INDUSTRIAL OCCUPATIONS--(Continued)

### 17.02 01 00 00 Electrical Appliances

Learning experiences specifically concerned with the repair, installation, and servicing of electrical appliances

### 17.02 02 00 00 Gas Appliances

Learning experiences specifically concerned with the repair, maintenance, and servicing of gas appliances

### 17.03 00 00 00 AUTOMOTIVE SERVICES

Classroom and shop experiences which include training in all phases of automotive maintenance repair work on all types of automotive vehicles. Included is training in the use of technical manuals and a variety of hand and power tools. Instruction and practice are provided in the diagnosis of malfunctions, disassembly of units, parts inspection and repair or replacement of parts involving engine overhaul and repair, ignition systems, carburetion, brakes, transmissions, front-end alignment, and the installation of a variety of accessories such as radios, heaters, mirrors, and windshield wipers. (See also 10.16 00 00 *Power/Automotive Mechanics* under INDUSTRIAL ARTS.)

### 17.03 01 00 00 Body and Fender

Specialized learning experiences concerned with all phases of repairing damaged bodies and fenders including metal straightening by hammering, smoothing areas by filing, grinding or sanding, concealment of imperfections, painting, and replacement of body components, including trim.

### 17.03 02 00 00 Mechanics

Learning experiences concerned with the components of the vehicle, including engine, power transmission, steering, brakes, and electrical systems. Included is training in the use of diagnostic and testing equipment and tools used in the repair process.

### 17.03 03 00 00 Specialization

Learning experiences which emphasize more detailed training in the adjustment and repair of the automobile, including the radiator, transmission, carburetor, brake system, and other units to achieve greater proficiency in the servicing of selected components.

### 17.03 99 00 00 Other Automotive Industries

Include here other organized subject matter and

learning experiences emphasized in automotive industries which are not listed above. (Specify.)

### 17.04 00 00 00 AVIATION OCCUPATIONS

Classroom and practical experiences which include instruction relating to aircraft maintenance, aircraft operation, and ground support.

### 17.04 01 00 00 Aircraft Maintenance

Classroom and shop experiences concerned with the inspection, repair, servicing, and overhauling of all airplane parts, including engines, propellers, instruments, airframes, fuel and oil tanks, control cables, and hydraulic units. Learning the use of technical manuals and various kinds of testing equipment is also emphasized.

### 17.04 01 01 00 Air Frame

Specialized classroom and shop experiences concerned with the maintenance and repair of all airplane parts other than engines, propellers, and instruments. Training emphasizes the layout and fabrication of sheet metal and other materials; assembly and installation of structural members; equipment and mechanical parts, and the disassembly and replacement of damaged or worn parts. Training prepares the pupil for the Federal Aviation Agency examination for the air frame mechanic's license.

### 17.04 01 02 00 Power Plant

Specialized classroom and shop experiences concerned with the maintenance and repair of all types of power plants for aircraft. Course work includes engine inspection and maintenance; lubrication and cooling; electrical and ignition systems; carburetion, fuel, and fuel systems, and propellers. Training prepares the pupil for the Federal Aviation Agency examination for the power-plant mechanic's license.

### 17.04 01 99 00 Other Aircraft Maintenance

Include here other organized subject matter and learning experiences emphasized in aircraft maintenance which are not listed above. (Specify.)

### 17.04 02 00 00 Aircraft Operations

Classroom and practical experiences concerned with the inflight operation of commercial planes, including piloting, navigating, and passenger services, e.g., flight engineer, pilot, and stewardess training.

### 17.04 03 00 00 Ground Operations

Classroom and practical experiences concerned

with the ground support of commercial planes, including passenger service, aircraft preflight service, and flight control, e.g., baggage handler, ticket agent, and traffic controller training

#### 17.05 00 00 00 BLUEPRINT READING

Classroom and practical experiences concerned with visualizing, preparing, developing, and interpreting blueprints. Included for study are the principles of sketching and drawing objects or structures, understanding and utilizing symbols, plans, sections, and details for communicating through blueprints, interpreting blueprints and their related specifications, and translating them into actuality.

#### 17.06 00 00 00 BUSINESS MACHINE MAINTENANCE

Classroom and shop experiences concerned with maintaining and repairing a variety of office machines such as typewriters, dictation machines, and calculators, data processing equipment used for recording and processing data and duplicating and mailing machines. Instruction includes diagnostic techniques, understanding of mechanical principles such as those involved in gears, cams, levers, and eccentrics; nomenclatures, uses and care of special hand and power tools, soldering, mechanical drawing, principles of electricity and electronics, uses of testing devices, and business procedures and customer relations.

#### 17.07 00 00 00 COMMERCIAL ART OCCUPATIONS

Organized specialized learning experiences which include theory, laboratory, and shopwork as they relate to the design and execution of layouts and making illustrations for advertising, display, and instructional manuals. Instruction includes advertising theory and preparation of copy, lettering, poster design, fashion illustration, silk screen, air brush and touchup, inks and color dynamics, package and product design, drawings for line and halftone reproduction, and other display devices and exhibits. Instruction leads to preparation for various types of employment such as fashion illustrator, technical illustrator, interior decorator, and advertising artist.

#### 17.07 01 00 00 Interior Decorating

Organized learning experiences concerned with the application of art principles to the design, selection, and arrangement of materials and objects in interiors of residential and commercial structures, and

in ships and aircraft to achieve esthetic effects or as a media for conveying ideas.

#### 17.07 02 00 00 Window Display

Organized learning experiences concerned with the application of art principles to the design, selection, layout, and arrangement of materials and objects for the purpose of attracting attention of customers.

#### 17.07 03 00 00 Product Design

Organized subject matter and experiences concerned with application of knowledge of commercial art to the design of commercial products for the purpose of decorative, esthetic effects and current styling consistent with the utilization value of such products. Such occupations also require knowledge of products and production methods.

#### 17.07 99 00 00 Other Commercial Art Occupations

Include here other subject matter and learning experiences emphasized in commercial art occupations which are not listed above. (Specify.)

#### 17.08 00 00 00 COMMERCIAL FISHERY OCCUPATIONS

Organized specialized learning experiences which include theory, laboratory, and shopwork as they relate to seamanship, navigation, and communications; utilization of rigging and other equipment; maintenance and repair of boats; techniques for finding fish; shipboard preservation and refrigeration; processing catches afloat and on shore; and operation and maintenance of all fishing gear and power plants. Instruction leads to preparation for various types of employment such as fisherman, processor, weigher, and equipment and special gear maintenance man.

#### 17.08 01 00 00 Seamanship

Organized learning experiences concerned with skills of seamanship, including the use and maintenance of line and nets, of navigational aids, and of radio and fundamental electronics equipment, techniques of boat handling, safety and survival at sea, and weather forecasting, and fundamental maintenance of decks and surface, engines, and power plants.

#### 17.08 02 00 00 Ship and Boat Operation and Maintenance

Organized learning experiences concerned with the planning and supervision of operation, maintenance, and safety of passenger or cargo vessels.



## 17 TRADE AND INDUSTRIAL OCCUPATIONS—(Continued)

### 17.08 99 00 00 Other Commercial Fishery Occupations

Include here other organized subject matter and learning experiences emphasized in commercial fishery occupations which are not listed above. (Specify.)

### 17.09 00 00 00 COMMERCIAL PHOTOGRAPHY OCCUPATIONS

Organized specialized learning experiences which include theory, laboratory, and studio work as each relates to all phases of camera uses and photographic processing. Instruction includes composition and color dynamics, contact printing, and enlarging; developing film, air brush and retouching, coloring, and copying; utilization of cameras, meters, and other photographic equipment, portrait, commercial, and industrial photography, and processes such as microfilming and preparing copy for other printing and graphic arts processing.

Instruction also emphasizes the development of skills and knowledge essential for employment in planning, developing, and producing in such areas as audiovisual materials and telecasting, and for employment as a commercial photographer, airbrush man, cameraman (offset printing), audiovisual projectionist, and cameraman (broadcasting).

### 17.09 01 00 00 Photographic Laboratory and Dark-room Occupations

Subject matter and learning experiences concerned primarily with developing and printing photographic still or motion picture film; controlling resultant prints, touch up of negatives; and finishing, coloring, restoring, and copying of prints.

### 17.09 99 00 00 Other Commercial Photography Occupations

Include here other subject matter and learning experiences emphasized in commercial photography which are not listed or classifiable above. (Specify.)

### 17.10 00 00 00 CONSTRUCTION AND MAINTENANCE TRADES

Classroom and shop experiences concerned with the erection, installation, maintenance, or repair of buildings, highways, airports, missile sites, and earth and other structures using assorted materials such as metal, wood, stone, brick, glass, concrete, or composition substances. Instruction is provided in a variety of

activities such as cost estimating; cutting, fitting, fastening, and finishing various materials; the uses of a variety of hand and power tools; and blueprint reading and following technical specifications. Knowledge concerning the physical properties of materials is also emphasized.

### 17.10 01 00 00 Carpentry

Classroom and shop experiences involving layout, fabrication, assembly, installation, and repair of structural units. Emphasized in instruction are the care and use of hand and power tools; equipment and materials; common systems of frame construction and the principles involved; and drafting, blueprint reading, applied mathematics, and materials estimating.

### 17.10 02 00 00 Electricity

Classroom and shop experiences concerned with the layout, assembly, installation, testing, and maintenance of electrical fixtures, apparatus, and wiring used in electrical systems. Instruction is provided in the reading, interpretation, and understanding of residential, commercial, and industrial wiring based on controlling electrical codes.

### 17.10 03 00 00 Heavy Equipment (Construction)

Classroom and practical work experiences concerned with the operation, maintenance, and repair of heavy-duty equipment such as bulldozers, cranes, graders, tractors, concrete mixers, crawler-mounted shovels, trailer-mounted compressors, and the gasoline or diesel engines powering the equipment.

### 17.10 03 01 00 Maintenance

Specialized classroom and practical work experiences concerned with (1) the field maintenance of earthmoving equipment, and (2) the general maintenance and overhaul of such equipment. Instruction covers inspection; maintenance and repair of tracks, wheels, and brakes; operating controls; electrical circuits; engines; and techniques in welding and brazing.

### 17.10 03 02 00 Operation

Specialized classroom and practical work experiences concerned with the uses, care, and operation of a variety of earthmoving equipment such as crawler tractors, motor graders, and motor scrapers; shovels, including dragline and hoe; and cranes. Instruction provides for experiences in digging, ditching, sloping, stripping, grading, back filling, clearing, and foundation excavating.

#### 17.10 04 00 00 Masonry

Specialized classroom and shop experiences concerned with the cutting, chipping, and fixing in position of concrete blocks, brick, and glass blocks using bonding materials and hand tools. Included is training in reading architectural plans, planning, and estimating.

#### 17.10 05 00 00 Painting and Decorating

Specialized classroom and shop experiences concerned with the preparation and finishing of exterior and interior surfaces by the application of protective or decorative coating materials such as lacquer, paint, and wallpaper. Instruction includes experiences in scraping, burning, or sanding surfaces, making, mixing, and matching paints and colors, and applying coating with brush, roller, or spray gun, or by cutting, pasting, and hanging wallpaper.

#### 17.10 06 00 00 Plastering

Specialized classroom and shop experiences concerned with the application of plaster, stucco, and similar materials to interior and exterior surfaces of structures. Instruction includes the preparation of surfaces and the smoothing and finishing of them.

#### 17.10 07 00 00 Plumbing and Pipe fitting

Specialized classroom and shop experiences concerned with layout assembly, installing, altering, and repairing piping systems, including related fixtures and fittings in structures, by the use of pipecutting, bending, and threading tools, welding, soldering, and brazing equipment, and other hand and power tools and equipment.

#### 17.10 08 00 00 Drywall Installation

Organized learning experiences concerned with the installation of wallboard, plasterboard, or other interior surfaces of structures.

#### 17.10 09 00 00 Glazing

Organized learning experiences concerned with preparation, fitting, and installing glass in structures and other openings of buildings, such as windows, doors, and partitions or in objects such as display cases and table tops.

#### 17.10 10 00 00 Roofing

Organized learning experiences concerned with covering roofs and exterior walls of structures with waterproofing or insulating materials such as asphalt, aluminum, slate, wood, and related composition materials.

#### 17.10 99 00 00 Other Construction and Maintenance Trades

Include here other subject matter and learning experiences emphasized in construction and maintenance trades which are not listed above. (Specify.)

#### 17.11 00 00 00 CUSTODIAL SERVICES

Classroom and shop experiences which are concerned with all phases of the care and cleaning of buildings, fixtures, and furnishings, including all types of building interiors such as linoleum, plastic, terrazo, tile, and wood floors, rugs; and plastic, wood panel, paint, and synthetic wall coatings. Skills are taught in the use and care of hand and power tools of such operations as dusting, dust mopping, wet mopping, scrubbing, waxing, and refinishing, and the cleaning of toilet rooms, windows, and walls.

Additional emphasis is on (1) characteristics of various cleaning agents and protective coatings--including their reactions on surfaces--and procedures of applying them; (2) sanitation and disinfectants; (3) scheduling work, and (4) purchasing custodial supplies.

#### 17.12 00 00 00 DIESEL MECHANIC

Classroom and shop experiences which are concerned with all phases of repair work on diesel engines used to power buses, ships, trucks, railroad trains, electric generators, construction machinery, and similar equipment. Instruction and practice are provided in the diagnoses of malfunction; disassembly of engines and examination of parts, reconditioning and replacement of parts; repair and adjustment of fuel injection systems, oil and water pumps, generators, governors, auxiliary and accompanying power units, controls, and transmissions. The uses of technical manuals, a variety of hand and power tools, and testing and diagnostic equipment are also studied.

#### 17.13 00 00 00 DRAFTING OCCUPATIONS

Organized specialized learning experiences which emphasize theory, use of the drafting room, and laboratory and shopwork as each relates to gathering and translating data or specifications, including the aspects of planning, preparing, and interpreting mechanical, architectural, structural, pneumatic, marine, electrical/electronic, topographical, and other drawings, and sketches. Instruction is designed to provide experiences in drawing, in the use of reproduction materials, equipment, and processes, the preparation of reports and data sheets for writing specifications; the development of plan and process charts and drawings; and the development of models.

## 17 TRADE AND INDUSTRIAL OCCUPATIONS—(Continued)

Instruction emphasizes the development of skills and knowledge essential for employment in ancillary capacities such as tracers or reproduction equipment operators, and for occupations such as mechanical draftsman, structural draftsman, tool designer, fixture designer, and punch and die designer. (See also 10.03 00 00 00 *Drafting* under INDUSTRIAL ARTS.)

### 17.14 00 00 00 ELECTRICAL OCCUPATIONS

Organized subject matter and experiences which include theory, laboratory, and shopwork as each relates to planning functions, generating and transmitting electricity, installing and maintaining electrical and communications systems, and equipment and components. Instruction emphasizes practical applications of mathematics, the sciences, circuit diagrams and blueprint reading, sketching, and other subjects essential to preparation for employment in the electrical occupations. (See also 10.04 00 00 00 *Electricity/Electronics* under INDUSTRIAL ARTS.)

#### 17.14 01 00 00 Industrial Electrician

Specialized classroom and practical instruction related to the maintenance and repair of a variety of industrial machinery driven by electric motors, or which are electrically controlled.

#### 17.14 02 00 00 Lineman

Specialized classroom and practical experiences concerned with the installation and operation and maintenance of local, long-distance, and rural lines, including pole- and tower-line erection and construction.

#### 17.14 03 00 00 Motor Repairman

Specialized classroom and practical experiences concerned with the assembly, installation, testing, maintenance, and repair of electric motors, generators, transformers, and related equipment.

#### 17.14 99 00 00 Other Electrical Occupations

Include here other subject matter and learning experiences emphasized in electrical occupations which are not listed above (Specify.)

### 17.15 00 00 00 ELECTRONICS OCCUPATIONS

Organized specialized learning experiences which include theory, laboratory, and shopwork as each

relates to planning, producing, testing, assembling, and installing and maintaining electronic communications equipment such as radio, radar, and television; industrial electronic equipment, including digital computers; new electronic systems, components, and equipment; and control devices. Emphasis is on solid-state devices and components, electron tube characteristics, low-frequency amplifiers, LC and RC Oscillators, transistors, and amplitude and frequency modulation. Instruction is designed to develop knowledge, understanding, and skills essential for employment in communications, industrial electronics, radio/television, and other electronics occupations. (See also 10.04 00 00 00 *Electricity/Electronics* under INDUSTRIAL ARTS.)

#### 17.15 01 00 00 Communications

Specialized classroom and practical experiences concerned with the assembly installation, operation, maintenance, and repair of communications equipment and systems of all types, e.g., industrial and entertainment sound systems, data processing, telephone dial systems, two-way radio, central circuits, hearing aids, and high-fidelity receiving sets.

#### 17.15 02 00 00 Industrial Electronics

Specialized classroom, laboratory, and practical experiences which are concerned with the basic elements of vacuum tubes and circuitry; using and servicing testing equipment and troubleshooting circuits; the study of an experience in repairing photoelectric controls, timers, selector switches, counters, recorders, and transducers; solid-state devices and components, the study of the characteristics and intricacies of equipment and components used in industry and research centers.

More advanced instruction includes study, analysis, and repair of magnetic amplifiers, motors, motor controls, electronic heating, saturable reactors, servo-mechanisms, pulse circuits, computers, and test instruments—including basic principles and servicing procedures. Field trips are frequently emphasized.

#### 17.15 03 00 00 Radio/Television

Specialized theory and practice which are concerned with the construction, maintenance, and repair of radios and television sets. Training also prepares pupils to diagnose troubles and make repairs on other electronic products such as high-fidelity sound equipment, phonographs, and tape recorders.

#### 17.15 99 00 00 Other Electronics Occupations

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Include here other subject matter and learning experiences emphasized in electronics occupations which are not listed above. (Specify.)

#### 17.16 00 00 00 FABRIC MAINTENANCE SERVICES

Classroom and laboratory experiences which are concerned with all phases of maintenance service on all types of fabrics. Instruction emphasizes identifying, marking and entering, sorting, assembling, wrapping, and bagging clothing and other fabrics; a wide range of information dealing with drycleaning and spotting agents, detergents, bleaches, and dyes; effects of heat on various fabrics; skills involved in the use of hand tools and power equipment such as power presses for flat work, roller presses, washers, extractors, and steamer and alteration and repair of fabrics.

#### 17.16 01 00 00 Drycleaning

Classroom and practical experiences concerned with theory and knowledge in drycleaning plant management and processes. Instruction includes receiving garments, inspecting, dry and wet cleaning, identifying spots and spotting, pressing, dyeing, and sorting and wrapping wearing apparel, household furnishings, and other articles of textile construction or leather. Also emphasized are experiences concerned with various cleaning agents, kinds of fabrics, alteration and repair of articles, and uses of hand and power tools and equipment.

#### 17.16 02 00 00 Laundering

Classroom and practical experiences concerned with theory and knowledge in laundering plant management and processes. Instruction includes receiving garments, inspecting, washing fabrics, spotting, ironing and pressing, dyeing, bleaching, sorting, and folding and wrapping wearing apparel and household and other articles of textile construction. Also emphasized are experiences concerned with various cleaning agents (including detergents), types of fabrics, and uses of hand and power tools and equipment.

#### 17.16 99 00 00 Other Fabric-maintenance Services

Include here other subject matter and experiences emphasized in fabric-maintenance services which are not listed above. (Specify.)

#### 17.17 00 00 00 FOREMANSHIP, SUPERVISION, MANAGEMENT, AND LEADERSHIP

Planned learning experiences designed to assist

supervisor in effectively utilizing the men, machines, and materials under his supervision by broadening his background knowledge and developing his leadership abilities. Included is the study of human behavior, organization and management, oral communication, labor laws, personnel procedures, job analysis, work simplification, employee utilization, and the development of writing techniques as applied to the preparation of letters, memos, and technical reports, speed-reading, and safety and first-aid procedures.

#### 17.18 00 00 00 GENERAL CONTINUATION

(For description see X 02 45.23 *General Continuation Class* page 62.)

#### 17.19 00 00 00 GRAPHIC ARTS OCCUPATIONS

Organized specialized learning experiences which include theory, laboratory, and shopwork as they relate to all phases of hot and cold typesetting, layout, composition, presswork and binding, including flexography, lithography, photoengraving, and other graphic arts related to the printing industry. Emphasis is on typographical layouts and design, hand and machine typesetting, camera and plate work, imposition, typesetting, offset and platen press makeup and operation, papercutting, ink and color preparation, binding, and production by silkscreen process. Instruction leads to preparation for various types of employment such as typesetter, compositor, cameraman, platemaker, cost analyst, expeditor, and production planner.

#### 17.19 01 00 00 Composition, Makeup, and Typesetting

Organized learning experiences concerned with layout, composition, makeup, and hand and machine typesetting and typesetting.

#### 17.19 02 00 00 Printing Press Occupations

Organized learning experiences concerned with making ready, operating, and maintaining printing presses.

#### 17.19 03 00 00 Lithography, Photography, and Platemaking

Organized learning experiences concerned with lithography, lithographic photography, stripping, and related platemaking processes.

#### 17.19 04 00 00 Photoengraving

Organized learning experience concerned with photographing illustrations and other copy that cannot

## 17. TRADE AND INDUSTRIAL OCCUPATIONS—(Continued)

be set up in type, developing negatives, and preparing photosensitized metal plates for use in printing.

### 17.19 05 00 00 Silk Screen Making and Printing

Organized learning experiences concerned with the preparation of silk screens and the operations of silk screen printing.

### 17.19 06 00 00 Bookbinding

Organized learning experiences concerned with gathering pages, forms, and related materials and assembling them into books or pamphlets. Included are techniques concerned with binding and repairing books and documents.

### 17.19 99 00 00 Other Graphic Arts

Include here other subject matter and learning experiences emphasized in graphic arts which are not listed above, including those involving new methods and technologies. (Specify.)

## 17.20 00 00 00 INDUSTRIAL ATOMIC ENERGY OCCUPATIONS

Organized specialized learning experiences which include theory, laboratory, and shopwork as they related to (1) the construction, operation, and maintenance of reactor plants and industrial "X-ray" equipment, and (2) the industrial uses of radio-isotopes for production and control operations. Almost every form of mechanical, electrical, electronic, and chemical skills and equipment generally used in industry may be involved.

### 17.20 01 00 00 Installation, Operation, and Maintenance of Reactors

Organized learning experiences which are concerned with atomic reactor plants and their use. Emphasized in addition to the knowledge and skills required in general construction of reactor plants are the related factors of reactor theory, operating characteristics and limitations, instrumentation, radiation hazards, maintenance, and emergency and safety procedures.

### 17.20 02 00 00 Radiography

Organized learning experiences which are concerned with the installation, safe operation, interpretation, and maintenance of industrial "X-ray" equipment. Training also includes atomic theory, operating

procedures, radiation protection standards and instruments, photographic film, and interpretation of film exposures.

### 17.20 03 00 00 Industrial Uses of Radioisotopes

Organized learning experiences which are concerned with the industrial use of radioisotopes in production and control operations. Training also includes atomic theory, electrical and electronic theory, operating procedures, specialized instrumentation, radiation protection, process and quality controls, interpretation, and recordkeeping.

### 17.20 99 00 00 Other Industrial Atomic Energy Occupations

Include here other subject matter and experiences emphasized in industrial atomic energy occupations which are not listed above. (Specify.)

## 17.21 00 00 00 INSTRUMENT MAINTENANCE AND REPAIR OCCUPATIONS

Classroom, laboratory, and practical experiences concerned with maintaining and repairing meters, instruments, watches and clocks, and other physical measuring devices. Instruction includes experiences in diagnosing malfunctions, disassembling, repairing and/or replacing faulty parts, cleaning, assembling and adjusting, and using special bench and hand tools, meters, and standards.

### 17.21 01 00 00 Instruments (other than watches and clocks)

Classroom, laboratory, and practical experiences concerned with maintaining and repairing various types of meters and other types of measuring and control devices, e.g., heating and air-conditioning controls; dial pressure gauges, scales and balances; electrical controlling, measuring, and recording devices; optical instruments, and navigational and aeronautical instruments. Instruction includes experiences in diagnosing malfunctions, disassembling, repairing and/or replacing faulty parts, cleaning, assembling and adjusting, and using special bench and handtools, meters, and standards.

### 17.21 02 00 00 Watchmaking and Repair

Classroom, laboratory, and practical experiences concerned with making, maintaining, and repairing clocks, watches, chronometers, and similar types of time-measuring devices. Instruction includes training in diagnosing malfunctions; disassembling and repairing or replacing faulty parts; cleaning, assembling, and ad-

justing parts, estimating repair costs, and replacing straps and bands, crystals, crowns, and hands. The various kinds and uses of special watchmaker's bench and hand tools, e.g., lathe, staking tool, loupe, pliers, truing calipers, poising tool, tuning machine, tweezers, soldering devices, pallet warmer for burnishing, and grinding, drilling, and polishing tools and devices are included in instruction. Cleaning and performing other operations are emphasized as well as the types and uses of various materials including metals, plastics, chemicals, oils, waxes, and abrasive powders.

#### 17.22 00 00 00 MARITIME OCCUPATIONS

Classroom, laboratory, theory, and practical experiences concerned with preparation for the performance of tasks on fresh-water and seagoing ships, tugboats, barges, floating drydocks, and other marine craft and floating structures, as well as related harbor and dock machinery and equipment. Firefighting, lifeboat work, and swimming are taught to all pupils. Emphasis is on fiber and wire rope handling and splicing, chipping and painting the hull, cargo handling gear and ground tackle, and watchstanding and lookout in the deck department; maintenance, operation, repair, and servicing main engines and auxiliary steam, refrigeration, water, and electrical systems in the engine department; and storekeeping, food preparation and service, and cabin upkeep in the steward department.

Instruction leads to preparation for various types of employment, such as ablebodied seaman, ship's carpenter, deck-maintenance man, quartermaster and boatswain, oiler, fireman-watertender, electrician, junior engineer, cook, chief steward, and wiper (engine-room), as well as employment ashore, e.g., stationary engineer, cargo handling or rigging operations.

#### 17.23 00 00 00 METALWORKING OCCUPATIONS

Organized specialized learning experiences which include theory, laboratory, and shopwork as they relate to the planning, manufacturing, assembling, testing, and repairing of parts, mechanisms, machines, and structures in which materials are cast, formed, shaped, molded, heat treated, cut, twisted, bent, pressed, stamped, fused, marked, or otherwise worked upon.

Instruction emphasizes the acquisition of knowledge, skills, and understanding which lead to preparation for various types of skilled and semiskilled employment such as sheetmetal man, toolmaker, foundryman, welder, millwright, production machine-tool operator, production molder, metalstamping operator, and metal patternmaker, as well as helper-

type jobs such as materials handler, and machine cleanup man

#### 17.23 01 00 00 Foundry

Specialized classroom and shop experiences designed to provide knowledge of the theory and applications of foundry practice in ferrous and nonferrous foundries. Instruction emphasizes foundry equipment, various sands and refractories, sand and machine molding, foundry chemistry and metallurgy, core-making, chipping, and grinding.

#### 17.23 02 00 00 Machine Shop

Specialized classroom and shop experiences concerned with all aspects of shaping metal parts. Instruction involves making computations relating to work dimensions, tooling, feeds, and speeds of machining. Also emphasized are work on the bench, and on lathes, shapers, milling machines, grinders and drills; the uses of precision measuring instruments such as layout tools, micrometers, and gages; methods of machining and heat treatment of various metals; blueprint reading; and the layout of machine parts. Instruction prepares the pupil to operate and repair all machines.

#### 17.23 03 00 00 Machine Tool Operation

Specialized learning experiences designed to prepare a semiskilled worker to run only one machine, e.g., lathe, grinder, drill press, milling machine, or shaper.

#### 17.23 04 00 00 Metal Trades (combined)

Specialized learning experiences designed to prepare an all-round metalworker capable of fabricating and assembling a variety of products in many industries. Instruction includes layout, sequence of operations; setting up and operating fabricating machines; positioning, aligning, fitting, and welding parts together; and designing and constructing templates and fixtures.

#### 17.23 05 00 00 Sheet Metal

Specialized classroom and shop experiences concerned with the layout, fabrication, erection or installation, and maintenance of items made of steel, copper, stainless steel, and aluminum such as ventilating, air conditioning, and heating ducts, kitchen equipment, signs, furniture, and skylights. Instruction emphasizes the use of handtools and machines such as the cornice brake, forming rolls, and squaring shears, drafting; and blueprint reading.

## 17 TRADE AND INDUSTRIAL OCCUPATIONS—(Continued)

### 17.23 06 00 00 Welding and Cutting

Specialized classroom and shop experiences concerned with all types of metal welding, brazing, and flame cutting. Instruction emphasizes properties of metals, blueprint reading, electrical principles, welding symbols, and mechanical drawing.

### 17.23 06 01 00 Gas Welding

Specialized classroom and shop learning experiences concerned with the use of gas welding equipment to weld metal parts together and planning and laying out work from drawings, blueprints, or other written specifications.

### 17.23 06 02 00 Electric Welding

Specialized classroom and shop learning experiences concerned with the use of arc and other electric welding equipment to weld metal parts together, as specified by drawings, blueprints, or other written specifications. Instruction is also given in inert-gas shielded arc welding with manually operated torch and semiautomatic gun.

### 17.23 06 03 00 Combination Welding

Specialized classroom and shop learning experiences concerned with the use of both gas welding and any combination of arc welding processes to weld metal parts together, according to diagrams, blueprints, or other written specifications.

### 17.23 06 04 00 Brazing and Soldering Operations

Specialized classroom and shop learning experiences concerned with setting up and operating induction heating equipment to braze (bond) together metal components, including instruction in the use of blueprints and electric or gas-fired ovens and equipment.

### 17.23 06 99 00 Other Welding and Cutting

Include here other subject matter and experiences emphasized in welding and cutting which are not listed above. (Specify.)

### 17.23 07 00 00 Tool and Die Making

Organized classroom and shop learning experiences concerned with analyzing specifications, laying out metal stock, setting up and operating machine tools, and fitting and assembling parts to make and repair metalworking dies, cutting tools, jigs, fixtures,

gages, and machinists' handtools, including instruction in the application of tool-and-die designs and construction, shop mathematics, metal properties, and layout, machining, and assembly procedures.

### 17.23 08 00 00 Die Sinking

Organized classroom and shop learning experiences concerned with laying out, machining, and finishing impression cavities in die blocks to produce forging dies, including instruction in the use of blueprints and methods of die sinking.

### 17.23 09 00 00 Metal Patternmaking

Organized classroom and shop learning experiences concerned with fitting, assembling, and hand-finishing castings and parts in making metal foundry patterns, including instruction in the use of handtools and analysis of specifications according to pattern-making methods.

### 17.23 99 00 00 Other Metalworking Occupations

Include here other organized subject matter and learning experiences emphasized in metal-working occupations which are not listed above. (Specify.)

## 17.24 00 00 00 METALLURGY OCCUPATIONS

Classroom and laboratory experiences concerned with assisting in examining and testing metal samples under the direction of physical metallurgists for determining the physical properties of metals, e.g., crystalline structure, porosity, homogeneity, and other characteristics. Instruction includes examining metals with x-ray, gamma ray, and magnetic-flux equipment for detecting defects, and the use of pressure devices, hot-acid baths, and other apparatus to test hardness, toughness, and other properties of metals. (See also 16.01 14 00 00 *Metallurgical Technology* under TECHNICAL EDUCATION.)

## 17.26 00 00 00 PERSONAL SERVICES

Planned learning experiences concerned with rendering a variety of personal services related to the physical appearance of individuals. These experiences include giving various kinds of beauty treatment, applying makeup to faces of studio and stage performers, attending clients taking baths, administering elementary massage, and fitting wigs.

### 17.26 01 00 00 Barbering

Classroom and practical experiences concerned with haircutting and styling, shaving, shampooing, and massaging. Emphasis is on hygiene, skin and scalp

diseases, and sterilization of instruments and utensils. Instruction is designed to qualify pupils for licensing examinations.

#### 17.26 02 00 00 Cosmetology

Classroom and practical experiences concerned with a variety of beauty treatments, including the care and beautification of the hair, complexion, and hands. Instruction includes training in giving shampoos, rinses, and scalp treatments; hair styling, setting, cutting, dyeing, tinting, and bleaching; permanent waving; facials; and manicuring and hand and arm massaging. Bacteriology, anatomy, hygiene, sanitation, salon management (including keeping records), and customer relations are also emphasized. Instruction is designed to qualify pupils for the licensing examination.

#### 17.26 99 00 00 Other Personal Services

Include here other organized subject matter and learning experiences emphasized in personal services which are not listed above. (Specify.)

#### 17.27 00 00 00 PLASTICS OCCUPATIONS

Classroom and shop experiences dealing with plastics and their characteristics, and with bench molding, fitting, internal carving, and finishing plastic and fiberglass materials into products. Instruction includes using hand and power tools.

#### 17.28 00 00 00 PUBLIC SERVICE OCCUPATIONS

Planned learning experiences concerned with training for the performance of occupations in local, State, and Federal government agencies. These occupations usually are concerned with specialized activities limited to local, county, State, and Federal governments, and do not occur elsewhere in the economy. Typical activities include police and fire protection, emergency and rescue squad work, safety, sanitation, transportation, and school bus driving.

#### 17.28 01 00 00 Fireman Training

Specialized class and practical experiences concerned with the practices and techniques of firefighting. Instruction treats the organization of a community fire department, the chemistry of fire; the use of water and other materials in fighting fires; the various kinds of firefighting equipment and aids and their uses, such as extinguishers, pumps, hose, rope, ladders, gas masks, hydrants, and standpipe and sprinkler systems; methods of entry; rescue principles, practices, and equipment; salvage equipment and work;

fire and arson investigation; inspection techniques; and radiation hazards.

#### 17.28 02 00 00 Law Enforcement Training

Specialized class and practical experiences designed to supplement the training provided by officially designated law enforcement agencies. Instruction includes acquiring and maintaining the uniform; patrolling on foot or in an automobile during the day or at night; dealing with misdemeanors, felonies, traffic violations, and accidents; making arrests; and testifying in court.

#### 17.28 99 00 00 Other Public Service Occupations

Include here other organized subject matter and learning experiences emphasized in public service occupations which are not listed above. (Specify.)

#### 17.29 00 00 00 QUANTITY FOOD OCCUPATIONS

Organized specialized learning experiences which include theory, laboratory, and shopwork as they relate to planning, selecting, purchasing, preserving, preparing, and serving food and food products. Included is the study of a variety of foods and their nutritional values, food processing, quantity cooking, storing equipment, and sanitation in food handling and management.

Instruction emphasizes quantity food service occupations in commercial food service establishments such as restaurants, cafeterias, drive-ins, tearooms, bakeries, and meat, fish, and poultry markets; in other retail food shops which are operated independently or are located in enterprises such as hotels, travel terminals, industrial plants, hospitals, or clubhouses; and in special food services such as those associated with airline catering or with takeout food establishments. Instruction is designed to prepare pupils for occupations such as baker, cook, chef, and meatcutter, or in planning, purchasing, preparing, storing, and preserving foods, or for services such as busboy, waiter, or waitress. (See also 04.07 00 00 00 *Food Services* under DISTRIBUTIVE EDUCATION, and 09.02 03 00 00 *Food Management, Production and Services* under HOME ECONOMICS.)

#### 17.29 01 00 00 Baker

Specialized classroom and practical work experiences associated with the preparation of bread, crackers, cakes, pies, pastries, and other bakery products for retail distribution or for consumption in a commercial food service establishment. Instruction includes making, freezing, and handling of bake prod-



## 17 TRADE AND INDUSTRIAL OCCUPATIONS--(Continued)

ucts; decorating; counter display; and packaging of merchandise. Training prepares the pupil as an all-round baker, although he may be employed in the production of any one type of goods such as pastries.

### 17.29 02 00 00 Cook/Chef

Specialized classroom and practical work experiences concerned with the preparation and cooking of a variety of foods. Included is study of the use and care of equipment; food standards such as the selection and preparation of food and the determination of size of servings; sanitation procedures, including food handling; cooking methods such as broiling and steaming; and preparation of special dishes such as soups, salads, garnishes, souffles, and meringues. Although the pupil qualifies as an all-round worker, he may, depending on the size of the establishment, specialize in preparation of specific types of foods, e.g., meats, vegetables, or sauces.

### 17.29 03 00 00 Meat Cutter

Specialized classroom and practical work experiences concerned with the cutting, trimming, and preparation of carcasses and consumer-size portions for sale by wholesale or retail establishments, or for cooking in a food service establishment. Instruction is provided in the use of certain meatcutting tools, identification of and techniques used in cutting different cuts of meats, dressing poultry, processing fish, counter display, and refrigeration of meats, poultry, and fish.

### 17.29 04 00 00 Waiter/Waitress

Specialized classroom and practical work experiences in table preparation, food handling, and serving. Instruction is provided in personal cleanliness and appearance, sanitary handling of food and equipment, setting a table, receiving and seating guests, taking orders and interpreting the menu, carrying the tray and dishes, placing orders in the kitchen, serving procedures, making out checks, accepting money and making change for checks, and proper relations with fellow employees and customers.

### 17.29 99 00 00 Other Quantity Food Occupations

Include here other organized subject matter and learning experiences emphasized in quantity food occupations which are not listed above. (Specify.)

## 17.30 00 00 00 REFRIGERATION

Classroom and shop experiences concerned with commercial chilling and freezing systems, including theory, application, and operation of compressors, expansion and float valves, thermostats, and pressure controls, diagnosing, overhauling, and testing methods and procedures, charging and discharging systems with refrigerants; and testing hermetic units, relays, and overload devices.

## 17.31 00 00 00 SMALL ENGINE REPAIR (INTERNAL COMBUSTION)

Classroom and shop experiences concerned with maintaining and repairing a variety of small engines used on portable power equipment, e.g., lawnmowers, outboard motorboats, chain saws, and Rototillers. Instruction includes principles of internal-combustion engine operation, reading technical manuals, and customer relations.

## 17.32 00 00 00 STATIONARY ENERGY SOURCES OCCUPATIONS

Organized specialized learning experiences, including theory, laboratory, and shopwork as each relates to the installation, operation, and maintenance of large power sources for purposes such as generating electricity, pumping, and heating. Major equipment involved may be turbines (steam, gas, or hydro), engines (diesel or gas), atomic reactors, or furnaces.

### 17.32 01 00 00 Electric Power Generating Plants

Organized learning experiences concerned with the installation, operation, and maintenance of electric power generating stations from which the electricity may be either for sale or industrial use. Instruction, in addition to that required in general construction, also includes theory, operation, and maintenance of gas, oil, or coal furnaces; atomic reactors; boilers; electrical generators, steam, gas, hydroturbines, and diesel engines, special instrumentation, control; and emergency and safety procedures. Occupational preparation may be designed to provide specialization for a specific type of electric power generating plant construction or operation, e.g., steam, hydro, atomic, diesel, or gas turbine.

### 17.32 02 00 00 Pumping Plants

Organized learning experiences concerned with the installation, operation, and maintenance of pumping installations handling liquids, gases, or solids for remote delivery through pipelines or for local use. Pumps are commonly driven by electric motors, diesel

(For a description of various aspects of biology see 13.00 00 00 00 NATURAL SCIENCES, 13.02 00 00 00 *Biological Sciences* (including General Biology))

20.01 03 00 00 \*Boys Nation

(American Legion, Indianapolis, Indiana.)

20.01 04 00 00 Debate Club

(For a description of subject matter see

05.00 00 00 00 ENGLISH LANGUAGE ARTS,

05.05 02 02 00 *Argumentation and Debate*.)

20.01 05 00 00 \*Distributive Education Clubs of America

(Distributive Education Clubs of America, Incorporated, Washington, D.C.)

20.01 06 00 00 Dramatics Club

(For a description of subject matter see

05.00 00 00 00 ENGLISH LANGUAGE ARTS,

05.06 00 00 00 *Dramatic Arts*.)

20.01 07 00 00 Family Living Club

(For a description of subject matter see

08.00 00 00 00 HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION, 08.01 05 00 00 *Family Life Education*,

09.00 00 00 00 HOME ECONOMICS,

09.01 06 00 00 *Family Relations*; and

15.00 00 00 00 SOCIAL SCIENCES/SOCIAL

STUDIES, 15.13 04 02 00 *Family*.)

20.01 08 00 00 \*4-H Club

(National 4-H Club Foundation of America, Incorporated, Washington, D.C.)

20.01 09 00 00 Foreign Language Club

(May involve various languages classical and/or modern) (For a description of subject matter of various foreign languages see 06.00 00 00 00 FOREIGN LANGUAGES)

20.01 10 00 00 \*Future Business Leaders of America

(National Business Education Association (NEA), Washington, D.C.)

20.01 11 00 00 \*Future Farmers of America

(See 01.00 00 00 00 *Agriculture*. Future Farmers of America activities are uniquely (by Act of Congress, P.L. 740) an integral part of all instructional

programs in agriculture. Time is frequently provided in regular classes to familiarize pupils with the objectives, functions, and activities of F.F.A. Additional items of information from chapters 3 and 4 of this handbook may be related to FFA to further describe the content and learning activities, e.g., category X 22 00., page 88, category X 23 00., pages 89-90; and category X 43 00., pages 101-102.) (U.S. Office of Education, Washington, D.C.)

20.01 12 00 00 \*Future Homemakers of America

(U.S. Office of Education, Washington, D.C.)

20.01 13 00 00 \*Future Teachers of America (NEA)

(National Education Association, Washington, D.C.)

20.01 14 00 00 \*Girls Nation

(American Legion Auxiliary, Indianapolis, Indiana.)

20.01 15 00 00 \*Industrial Arts Student Club

(National Education Association, Washington, D.C.)

20.01 16 00 00 International Relations Club

(For a description of subject matter see 15.00 00 00 00 SOCIAL SCIENCES/SOCIAL STUDIES, 15.11 04 00 00 *International Relations*.)

20.01 17 00 00 Journalism Club (including school newspaper and annual)

(For a description of subject matter see 05.00 00 00 00 ENGLISH LANGUAGE ARTS, 05.04 03 00 00 *Journalism*.)

20.01 18 00 00 \*Junior Achievement, Incorporated

(Junior Achievement, Incorporated, New York, N.Y.)

20.01 19 00 00 Literary Club

(For a description of subject matter see 05.00 00 00 00 ENGLISH LANGUAGE ARTS, 05.03 00 00 00 *Literature*.)

20.01 20 00 00 Mathematics Club

(May involve various aspects of mathematics) (For a description of selected aspects of mathematics see 11.00 00 00 00 MATHEMATICS)

20.01 21 00 00 Music Club

(May involve various aspects of music) (For a

## 17 TRADE AND INDUSTRIAL OCCUPATIONS (Continued)

### 17.36 00 00 00 WOODWORKING OCCUPATIONS

Classroom and shop experiences concerned with woodworking occupations other than construction carpentry. Instruction emphasizes laying out and shaping stock, assembling complete wooden articles or subassemblies, marking, blading, sawing, carving, and sanding wood products, and repairing wooden articles. Also emphasized are various hand and power tools and their uses.

#### 17.36 01 00 00 Millwork and Cabinet Making

Specialized class and practical work experiences concerned with mass production of products such as window frames, moldings, trim, and panels, and with making such products as furniture, store fixtures, kitchen cabinets, and office equipment. Instruction includes training in cutting, shaping, and assembling parts by means of handtools and woodworking machines, refinishing furniture, installation of hardware, e.g., hinges, catches, and drawer pulls, planning layouts, blueprint reading, drafting, and various kinds of woods.

#### 17.36 99 00 00 Other Woodworking Occupations

Include here other organized subject matter and learning experiences emphasized in woodworking occupations which are not listed above. (Specify.)

### 17.99 00 00 00 OTHER TRADE AND INDUSTRIAL OCCUPATIONS

Include here other organized subject matter and learning experiences emphasized in trade and industrial occupations which are not listed or classifiable in one of the above major categories. (Specify.)

## GENERAL ELEMENTARY EDUCATION AND GENERAL SECONDARY EDUCATION

### 18.00 00 00 00

The terms General Elementary Education and General Secondary Education, as classified in chapter 5 and defined in chapter 6 of this handbook, usually refer to instruction which takes place in a self-contained class. Learning experiences are concerned with the knowledges, skills, appreciations, attitudes, and behavioral characteristics considered to be needed by all pupils in terms of the broad educational outcomes

which should be achieved by all pupils to the limits of their capacities during the elementary and secondary school years or grades

The Ad Hoc Committee for General Elementary Education and General Secondary Education applied the following rationale to the selection of items for placement in the General Elementary Education and General Secondary Education area: (1) the items were determined by consensus of the committee to be appropriate in terms of types of instructional organization; (2) the items could be defined in brief form using only salient descriptive elements; and (3) the various types of instructional organization classified were identifiable by titles which the committee considered to be most commonly used in current practice.

The items of information in chapters 3 and 4 are supportive to general elementary education and general secondary education instructional programs. For examples, see the items classified in the X 07 00. Series Evaluation and Curriculum Improvement on pages 71 - 78, and the items classified in the X 32 00. Series School Services Supporting Instruction on pages 90 - 96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

Included under the heading of General Elementary Education and General Secondary Education are items of information which identify selected types of instructional organizations for carrying on instruction.

### 18.01 00 00 00 GENERAL ELEMENTARY YEARS OR GRADES

Usually includes education in the prekindergarten, kindergarten, and years or grades 1 through 6, 7, or 8. In practice, instruction usually takes place in a self-contained class.

#### 18.01 01 00 00 Early Elementary Years or Grades, Early Childhood Education

Includes instruction at the preprimary and primary levels. In practice, instruction usually takes place in a self-contained class.

#### 18.01 01 01 00 Preprimary Level

Includes education during the year or years preceding the first grade. A prekindergarten or kindergarten class may be organized as a grade of an elementary school which includes the primary level, or it may be a part of a separate school. In some school systems such a group is called junior primary.

18.01 61 02 00 Primary Level (including grades 1, 2, and 3 or equivalent)

Includes education during the years or grades preceding the intermediate elementary grades, usually years or grades 1, 2, and 3 or the equivalent.

18.01 01 99 00 Other Early Elementary Organizations

Include here any arrangement of early elementary years or grades not classified above. (Specify.)

18.01 02 00 00 Intermediate Elementary Level (including years or grades 4, 5, and 6 or equivalent)

Usually includes education in the years or grades 4, 5, and 6 or the equivalent. In practice, instruction frequently takes place in a self-contained class.

18.01 03 00 00 Upper Elementary Level (including years or grades 7 and 8 or equivalent)

Usually includes education in the years or grades 7 and 8 or the equivalent.

18.01 99 00 00 Other Plan for General Elementary Years or Grades

Include here any arrangement of elementary grades or years not classified above. (Specify.)

18.02 00 00 00 MIDDLE SCHOOL LEVEL

A separately organized and administered school usually beginning with grades 5 or 6 or its equivalent and including at least 3 grades or years. Most middle schools presume, in ultimate plan if not in present reality, a four-year high school for the grades or years which follow, as in a 4-4-4 plan or a 5-3-4 plan.

18.03 00 00 00 GENERAL SECONDARY YEARS OR GRADES

Any span of years or grades beginning with the next year or grade following the elementary school and usually ending with or below year or grade 12, including the junior high school and other types of high school.

18.03 01 00 00 Junior High School Level

A separately organized and administered secondary school intermediate between the elementary and senior high school, usually including years or grades 7, 8, and 9 (in a 6-3-3 plan) or years or grades 7 and 8 (in a 6-2-4 plan)

18.03 02 00 00 Senior High School Level

A secondary school offering the final years or grades of high school work necessary for graduation and invariably preceded by a junior high school.

18.03 99 00 00 Other Secondary School Level

Include here any arrangement of secondary school years or grades not classified above. (Specify.)

## DIFFERENTIALIZED CURRICULUM FOR HANDICAPPED PUPILS

19.00 00 00 00

The differentialized curriculum for handicapped pupils reflects an increasing awareness today of the *individual* needs of children. Many children with various types of handicaps cannot benefit from *basic* subject matter without special education. Handicapped children present learning difficulties, sensory and motor impairments, which require careful study for successful adaptation of instruction. Teachers of exceptional children integrate professional information from psychology, education, and medicine for instructional and therapeutic services. Consequently, special education as applied to each type of handicapped child has developed some distinctive techniques and materials which distinguish it from regular classroom instruction.

All handicapped children should have appropriate educational opportunities. As the school shares the responsibility with other social institutions for educating all children, it may make a unique contribution in discovering handicaps and providing the needed services for supporting the type of instruction which will enable pupils to fulfill their maximum potential. The majority of pupils with mild or uncomplicated handicaps can be served best within normal classes for instruction. Those pupils whose handicaps are of such nature and degree as to interfere with intellectual development and learning under regular class methods will, require differentialized curriculum for some part of, and, frequently, for all of their education.

The Ad Hoc Committee for Differentialized Curriculum for Handicapped Pupils applied the following rationale to the selection of the items for placement in the area. (1) the items were determined by consensus of the committee to be appropriate to the area in terms of selected techniques, materials, and services essential to meeting the needs of pupils having varied handicaps. (2) the items could be defined in brief form using only salient descriptive elements; and (3) the various items

## 19 DIFFERENTIALIZED CURRICULUM FOR HANDICAPPED PUPILS (Continued)

classified under Differentiated Curriculum for Handicapped Pupils were identifiable by titles which the *ad hoc* committee considered to be currently in use and accepted in practice.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples, see the items classified in the X 07 00 Series Evaluation and Curriculum Improvement on pages 71-78; the items classified in the X 32 00 Series School Services Supporting Instruction on pages 90-96, and the items classified in the X 09 00 Series Pupils Served by Program of Studies on pages 80-83, e.g., mentally retarded, blind, hard of hearing, speech impaired, crippled. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

### 19.01 00 00 00 COMMUNICATION SKILLS

Activities concerned with learning and using oral, written, and visual language for interrelating with others in the environment.

#### 19.01 01 00 00 Language Stimulation

An organized activity designed for assisting pupils learning to respond to a wide range of stimuli through ordinary channels of communication. Provision is made for the pupil to learn language in a developmental way, depending upon the type of stimuli or conditioning he receives.

#### 19.01 02 00 00 Language Development

Activities designed to provide for a continuous, sequential system of learning the spoken and written language for communicative purposes.

#### 19.01 03 00 00 Language Correction

Learning activities designed to change faulty language patterns which have already been formed. This involves a need for change in the existing language behavior as opposed to language development.

#### 19.01 04 00 00 Speech Stimulation

Learning activities which involve the conditioning of speech and language learning by others in the environment. Maximum stimulation provides a direct aid to the speech development process.

#### 19.01 05 00 00 Speech Development

The speech and language learning process which usually proceeds from unrelated sounds through several stages until the spoken words have a mutual meaning to the speaker and to the people in the learning environment. Some developmental teaching is done in this same manner.

#### 19.01 06 00 00 Speech Correction

The remedial process of helping a person overcome his speech deviation. This involves a methodical process of teaching speech and integrating the changed speech pattern into the person's communicative skills.

#### 19.01 07 00 00 Special Communication Methods

Special methods, other than speech and written language, used by handicapped persons for communicating with others in their environment. These methods are also used as tools in teaching language to the handicapped.

#### 19.01 07 01 00 Braille Reading and Writing

A system designed to teach blind persons to read and write through the use of embossed characters formed by dots.

#### 19.01 07 02 00 Stimulus Magnification (Vision)

A type of mechanical magnification used to increase a visual stimulus in order to make it possible for an individual with impaired sight to deal more extensively with his environment.

#### 19.01 07 03 00 Stimulus Magnification (Hearing)

A type of mechanical amplification used to increase the auditory stimulus in order to make it possible for an individual with impaired hearing to deal more extensively with sounds of his environment.

#### 19.01 07 04 00 Manual Communication

A visual means of communication used by persons having severely impaired hearing. Its most generally accepted forms are finger spelling and the sign language. It is also used by educators in many schools as a means of instruction. The system is orthographic in nature in that distinct hand positions are identified with the 26 letters of the English alphabet. This system as an aid to teaching is more widely accepted because it follows normal patterns of straight language.

#### 19.01 07 05 00 Electronic Reproduction

The use of tape or disc recordings to provide the auditorily or visually impaired individual with

material to increase his general vocabulary and to provide supplemental academic information.

**19.01 07 06 00 Typing for Communication**

A device designed for use in connection with teaching language to pupils who are blind, partially sighted, brain-injured, or physically handicapped. With physically handicapped persons, legibility is often difficult to obtain and typing provides both clarity and speed.

**19.01 07 06 00 Speech Reading (Lip Reading)**

A skill taught to hard of hearing and deaf persons. It involves learning to understand the lip and facial movements of individuals who are speaking by picking up cues to what is being said.

**19.01 07 99 00 Other Special Communication Methods**

Include here other organized subject matter and learning experiences emphasized in special communication methods which are not listed above in this subcategory. (Specify.)

**19.01 99 00 00 Other Communication Skills**

Include here other organized subject matter and learning experiences emphasized in communication skills which are not listed or classifiable above in this category. (Specify.)

**19.02 00 00 00 INTERPERSONAL AND BEHAVIORAL COPING SKILLS**

Curriculum approaches utilized to emphasize personal and social skills.

**19.02 01 00 00 Self-concept Development**

Learning situations designed to enhance the pupil's perception of himself and his environment. Required in these situations is a high degree of sensitivity to the interaction between the pupil's feelings of self and/or identity and his integration of the factors with the environment to which he is exposed. Adaptations of curriculum are oriented to assisting the child in realistically appraising his educational and behavioral status. A planned developmental program may be necessary to expose the pupil to learning experiences and tasks which afford him positive concepts of self.

**19.02 02 00 00 Self-concept Reeducation**

Learning situations designed to assist handicapped pupils in developing and nurturing feelings of

competency. In many situations this may be accomplished by way of the school tasks, in other situations, longer periods of orientation or reorientation to school situations may be necessary.

**19.02 03 00 00 Social**

Learning situations designed to assist the pupil in maximum interaction with others and in responding to the social demands of the environment.

**19.02 99 00 00 Other Interpersonal and Behavioral Coping Skills**

Include here other organized subject matter and learning experiences emphasized in interpersonal and behavioral skills not listed above in this category. (Specify.)

**19.03 00 00 00 MOTORIC SKILLS**

Instruction specifically designed to develop adequate motoric function which is impaired by restrictions in physical movement caused by crippling conditions, prolonged illness, visual defects, lack of auditory cues, serious cognitive defects, or behavioral disorders often resulting in limited sensory experience upon which school learning is based.

**19.03 01 00 00 Dexterity Skills**

Learning activities which involve practice, through use of selected materials, in reaching, lifting, holding, and moving objects on various developmental levels in a graded sequence of activities to develop muscle control and coordination.

**19.03 01 01 00 Gross Motor Skills**

Learning experiences designed to assist the pupil in working toward relatively independent physical movement, e.g., the use of wall rails for the crippled and guards on projections for the visually impaired, poorly balanced, or seizure prone; and practice in crawling, walking with support, and dancing (no matter how clumsy) for the severely motorically retarded. Included is instruction in game and sports rules for the hearing impaired, blind, crippled, and retarded, and correction of faulty gait patterns and elimination of unnecessary and interfering motions as well as structuring to promote rhythm and efficiency. Substitution for normal bodily characteristics that are absent due to a severe sensory loss (i.e., eye control for the blind, and quiet behavior for the deaf during auditory activities) are also emphasized.

**19.03 01 02 00 Fine Motor Skills**

## 19 DIFFERENTIALIZED CURRICULUM FOR HANDICAPPED PUPILS— (Continued)

Learning experiences designed to provide opportunity for pupils to use hands and fingers, hooks or artificial hands, in a variety of motivating activities including instruction to increase effectiveness by developing recognition of the need for guided practice and acceptance of an extended stage of awkwardness and/or retarded social use of the hands at given chronological ages. Emphasis is on materials designed for manipulation by pupils without usual experiences, enabling fantasy play for sensorily impaired and experientially deprived pupils, and a variety of creative art experiences for deaf, crippled, and mentally retarded pupils.

### 19.03 02 00 00 Physical Management

Learning experiences and instruction designed to assist pupils in developing physical skills for personal care and social functioning, whether performed independently in a usual or modified situation or with the assistance of another person.

### 19.03 02 01 00 Self-Help Skills

Experiences and instruction organized to promote dressing, feeding, grooming and toileting skills for pupils who have limited or poorly controlled physical movement, or who do not have the usual visual cues, self-discipline, or mental maturity. The development of a workable self-concept is emphasized.

### 19.03 02 02 00 Use of Devices and Equipment (ordinary and special)

Instruction and practice concerning movements such as opening doors, turning dials efficiently and at appropriate times, propelling a wheel chair to standard chair or toilet seat, using crutches on various surfaces, locking and unlocking braces, mounting curbs and stairs, and riding a bicycle though blind. Also included are the care of hearing aids and the uses of prosthetic devices, talking books, Braille writers, and optic aids. Emphasized with pre-determined structure is learning which is appropriate, functional, and sensible in the use of toys and school materials as well as in participation in special art and music instruction. The selection of materials with built-in skills to be learned is an important consideration.

### 19.03 02 03 00 Personal Safety

Learning situations which are provided

when either the external environment or activity is to be modified to circumvent hazards and assure safety for self and others. Also emphasized are (1) the development of awareness of cues from intact senses to avert danger of collision, fire, health hazards, and personal attacks, (2) learning activities which help the pupil to perceive the physical situation of an anticipated destination and determine a means of communication and mobility to prevent potential injury or loss; and (3) the recognition of symptoms of fatigue, seizures, infections, reaction to drugs, insulin reaction or diabetic coma, hemorrhages, excessive fear or excitability, and limits of functional hearing or vision.

### 19.03 03 00 00 Mobility Training

The process of teaching orientation in space, the uses of body parts in movement, and travel skills to pupils having problems such as visual impairment, orthopedic conditions, mental retardation, emotional disturbances, and neurological impairments.

### 19.03 03 01 00 Orientation

Learning situations designed to teach a pupil to place his own body in relation to permanent and temporarily placed objects; judge distances and appreciate that the location of an object is independent of the path taken to reach it; distinguish between movement of self and of an external object; develop positional memory, and directional, temporal, and quantitative relationships, and unify information received from various senses.

### 19.03 03 02 00 Travel

Planned opportunities for pupils to apply mobility skills in school and community with use of intact senses. Gradual use of public transportation is emphasized for practice in reaching predetermined destinations, mounting steps, spending money, transferring from one vehicle to another, and behavior in a vehicle—particularly for the visually impaired, mentally retarded, crippled, and emotionally disturbed. The application of directional and spatial signals, the importance of detailed preparation prior to traveling to new localities, and the skills or procedures to be utilized in emergencies.

### 19.03 99 00 00 Other Motoric Skills

Include here other organized subject matter and learning experiences emphasized in motoric skills not listed above in this category. (Specify.)

### 19.04 00 00 00 PERCEPTUAL SKILLS

Learning experiences designed to relieve or correct

visual, auditory, or tactual and kinesthetic perceptual problems and enable handicapped pupils to integrate multiple-sensory impressions.

**19.04 01 00 00 Auditory Training: Stimulation**

Activities designed to motivate pupils to make maximum use of hearing for learning, esthetic enjoyment and interpersonal communication.

**19.04 02 00 00 Auditory Training: Development**

Intensive and sequential learning activities planned and organized to help pupils who have serious sensory deficits develop maximum skills in hearing.

**19.04 03 00 00 Auditory Training: Correction**

Systematic Intervention designed to help pupils alter auditory misperceptions and improve auditory discrimination and listening skill.

**19.04 04 00 00 Tactile and Kinesthetic Stimulation**

Planned activities which encourage pupils to make maximum use of tactile and kinesthetic experiences in general educational situations as well as in specific educational procedures such as reading Braille.

**19.04 05 00 00 Tactile and Kinesthetic Development**

Intensive and sequential activities which help pupils who have serious neuromuscular impairments progress toward the use of tactile and kinesthetic sensations for learning, including the development of an understanding of these sensory experiences as well as ability to relate them to visual and auditory sensations.

**19.04 06 00 00 Tactile and Kinesthetic Correction**

Systematic training or reeducation to enable pupils to attach correct and meaningful significance to skin and muscle sensations.

**19.04 07 00 00 Olfactory Stimulation**

Planned activities which encourage blind pupils to make maximum use of Olfaction in learning situations in order to increase the pupil's knowledge and understanding of his environment.

**19.04 08 00 00 Olfactory Development**

Intensive sequential activities designed to help the blind pupil progress toward the development of an understanding of Olfaction well as relating it to other senses.

**19.04 09 00 00 Visual Stimulation**

Activities which motivate pupils to make maximum use of vision for learning, esthetic enjoyment, and nonverbal communication.

**19.04 10 00 00 Visual Development**

Intensive and sequential learning activities designed to help pupils who have serious visual loss or perceptual disorders to maximize the use of their residual vision or develop appropriate responses to visual stimuli.

**19.04 11 00 00 Visual Correction**

Systematic intervention which provides reeducation for pupils who have formed inaccurate impressions as a result of visual limitations.

**19.04 12 00 00 Personal Spatial Relationships**

Intensive and sequential learning activities which are designed to enable handicapped pupils to observe and understand the boundaries of their own bodies and to develop appropriate relationships to objects and persons in the environment.

**19.04 99 00 00 Other Perceptual Skills**

Include here other organized subject matter and learning experiences emphasized in perceptual skills not listed above in this category. (Specify.)

**19.05 00 00 00 VOCATIONAL AND AVOCATIONAL SKILLS DEVELOPMENT**

Programs of instruction comprised of organized subject matter and related experiences designed to develop in the handicapped pupil the knowledge, skills, attitudes, and appreciations that relate to the world of work and the profitable use of leisure time.

**19.05 01 00 00 Vocational Information**

Planned classroom activities concerned with the place of work in our culture, the various resources for obtaining employment, the physical, social, and emotional skills required for retaining a job, overview of employment skill requisites, resources for improving one's work potential, and other preemployment information. Also included a planned observations of the world of work outside the school setting.

**19.05 02 00 00 Prevocational Work Experience**

Planned exposure to work on a paid or nonpaid basis for handicapped pupils under the supervision and control of school authorities. These experiences may be within the school environs, sheltered work settings,



19 DIFFERENTIALIZED CURRICULUM  
FOR HANDICAPPED PUPILS-  
(Continued)

or in the competitive job market. School academic credit may or may not be given for these school-organized and supervised experiences.

19.05 03 00 00 Specialized Vocational Preparation  
Experiences and subject matter organized to develop skills that will result *directly* in employment upon termination of the school enrollment. Examples of this are course work in small appliance repair, IBM keypunch operation, stenography, or offset printing skills. (Specify vocations.)

19.05 04 00 00 Avocational Information  
The study of nonvocational activities and related problems. Frequently emphasized is information relating to constructive use of nonwork time including the study of recreational resources and facilities, values of outdoor living, table games, methods and procedures in home entertainment of guests, the place of church activities in family living, and the use of tour guides and other resource information relating to leisuretime utilization.

19.05 05 00 00 Avocational Experience  
Experiences designed to convey specific recreational and leisuretime skills to the handicapped pupil or pupils in an applied manner. Included are such activities as dancing instruction, musical skill acquisition, art lessons, dramatic instruction, and therapeutic recreation. These experiences, organized and supervised by the school, may or may not include school academic credit.

19.05 99 00 00 Other Vocational and Avocational Skills Development  
Include here other organized experiences, activities, and subject matter emphasized to enrich the life of the handicapped pupil or pupils that relate to present or future vocational and avocational competence, appreciation or attitude development, which are not listed above in this category. (Specify.)

19.99 00 00 00 OTHER - DIFFERENTIALIZED  
CURRICULUM FOR HANDI-  
CAPPED PUPILS

Include here other organized subject matter and learning experiences emphasized in curriculum exceptions for handicapped pupils which are not listed or

classifiable in one of the above major categories. (Specify.)

COCURRICULAR ACTIVITIES

20.00 00 00 00

Cocurricular activities (experiences) are comprised of the group of school-sponsored activities, under the guidance or supervision of qualified adults, designed to provide opportunities for pupils to participate in such experiences on an individual basis, in small groups, or in large groups—at school events, public events, or a combination of these—for purposes such as motivation, enjoyment, and improvement of skills. In practice, participation usually is not required and credit usually is not given. When participation is required or credit is given the activity generally is considered to be a course.

Under this heading are the items of information which identify the various cocurricular activities. Each item of information is treated in one of the following ways: by cross-reference to the subject-matter area in which it has its origin, or, by description; or, by identification with an asterisk (\*) referring to descriptive literature from the office of the organization sponsoring the activity. The classified items are *only* illustrative of the wide range of activities; and, the asterisk (\*) is not necessarily identified with all of the listed activities to which it may appropriately apply. The cocurricular activities have been classified into five major categories: academic, athletic, music, school and/or public service, and social

20.01 00 00 00 ACADEMIC COCURRICULAR AC-  
TIVITIES

A combination of subject matter and experiences, usually not provided in a regular class, designed for pupils who wish to pursue satisfying individual/group interests and study in specific aspects of the subject matter provided in the regular class. Frequently emphasized are opportunities for pupils to enhance their personal understanding, initiative, knowledge and skills important to the selected interest, techniques of systematic planning and thinking, desirable citizenship, and cooperativeness which will enrich their regular classwork and personal lives.

20.01 01 00 00 Art Club

(For a description of various aspects of art see  
02.00 00 00 00 ART.)

20.01 02 00 00 Biology Club

(For a description of various aspects of biology see 13.00 00 00 00 NATURAL SCIENCES, 13.02 00 00 00 *Biological Sciences* (including General Biology).)

- 20.01 03 00 00 \*Boys Nation  
(American Legion, Indianapolis, Indiana.)
- 20.01 04 00 00 Debate Club  
(For a description of subject matter see 05.00 00 00 00 ENGLISH LANGUAGE ARTS, 05.05 02 02 00 *Argumentation and Debate*.)
- 20.01 05 00 00 \*Distributive Education Clubs of America  
(Distributive Education Clubs of America, Incorporated, Washington, D.C.)
- 20.01 06 00 00 Dramatics Club  
(For a description of subject matter see 05.00 00 00 00 ENGLISH LANGUAGE ARTS, 05.06 00 00 00 *Dramatic Arts*.)
- 20.01 07 00 00 Family Living Club  
(For a description of subject matter see 08.00 00 00 00 HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION, 08.01 05 00 00 *Family Life Education*; 09.00 00 00 00 HOME ECONOMICS, 09.01 06 00 00 *Family Relations*; and 15.00 00 00 00 SOCIAL SCIENCES/SOCIAL STUDIES, 15.13 04 02 00 *Family*.)
- 20.01 08 00 00 \*4-H Club  
(National 4-H Club Foundation of America, Incorporated, Washington, D.C.)
- 20.01 09 00 00 Foreign Language Club  
(May involve various languages—classical and/or modern) (For a description of subject matter of various foreign languages see 06.00 00 00 00 FOREIGN LANGUAGES.)
- 20.01 10 00 00 \*Future Business Leaders of America  
(National Business Education Association (NEA), Washington, D.C.)
- 20.01 11 00 00 \*Future Farmers of America  
(See 01.00 00 00 00 *Agriculture*. Future Farmers of America activities are uniquely (by Act of Congress, P.L. 740) an integral part of all instructional

programs in agriculture. Time is frequently provided in regular classes to familiarize pupils with the objectives, functions, and activities of F.F.A. Additional items of information from chapters 3 and 4 of this handbook may be related to FFA to further describe the content and learning activities, e.g., category X 22 00., page 88; category X 23 00., pages 89–90; and category X 43 00., pages 101–102.) (U.S. Office of Education, Washington, D.C.)

- 20.01 12 00 00 \*Future Homemakers of America  
(U.S. Office of Education, Washington, D.C.)
- 20.01 13 00 00 \*Future Teachers of America (NEA)  
(National Education Association, Washington, D.C.)
- 20.01 14 00 00 \*Girls Nation  
(American Legion Auxiliary, Indianapolis, Indiana.)
- 20.01 15 00 00 \*Industrial Arts Student Club  
(National Education Association, Washington, D.C.)
- 20.01 16 00 00 International Relations Club  
(For a description of subject matter see 15.00 00 00 00 SOCIAL SCIENCES/SOCIAL STUDIES, 15.11 04 00 00 *International Relations*.)
- 20.01 17 00 00 Journalism Club (including school newspaper and annual)  
(For a description of subject matter see 05.00 00 00 00 ENGLISH LANGUAGE ARTS, 05.04 03 00 00 *Journalism*.)
- 20.01 18 00 00 \*Junior Achievement, Incorporated  
(Junior Achievement, Incorporated, New York, N.Y.)
- 20.01 19 00 00 Literary Club  
(For a description of subject matter see 05.00 00 00 00 ENGLISH LANGUAGE ARTS, 05.03 00 00 00 *Literature*.)
- 20.01 20 00 00 Mathematics Club  
(May involve various aspects of mathematics) (For a description of selected aspects of mathematics see 11.00 00 00 00 MATHEMATICS.)
- 20.01 21 00 00 Music Club  
(May involve various aspects of music) (For a

## 20 COCURRICULAR ACTIVITIES—

(Continued)

description of subject matter see 12.00 00 00 00  
MUSIC.)

20.01 22 00 00 \*National Honor Society (NEA)  
(National Education Association, Washington,  
D.C.)

20.01 23 00 00 \*National Junior Honor Society  
(NEA)  
(National Education Association, Washington,  
D.C.)

20.01 24 00 00 \*National Thespians Society  
(National Thespians Society, College Hill Sta-  
tion, Cincinnati, Ohio.)

20.01 25 00 00 \*Office Education Association  
(Office Education Association, P.O. Box 4287,  
Madison, Wisconsin.)

20.01 26 00 00 Photography Club  
(For a description of the subject matter see  
02.00 00 00 00 ART, 02.02 07 00 00 *Photography  
and Related Media*; 10.00 00 00 00 INDUSTRIAL  
ARTS, 10.07 02 00 00 *Photography*;  
13.00 00 00 00 NATURAL SCIENCES,  
13.03 00 00 00 *Physical Sciences (including General  
Physical Science)*; and 17.00 00 00 00 TRADE AND  
INDUSTRIAL OCCUPATIONS, 17.09 00 00 00  
*Commercial Photography Occupations*.)

20.01 27 00 00 \*Quill and Scroll  
(Quill and Scroll Society, University of Iowa,  
Iowa City, Iowa.)

20.01 28 00 00 Science Club  
(May involve various aspects of the natural  
sciences) (For a description of subject matter see  
13.00 00 00 00 NATURAL SCIENCES.)

20.01 29 00 00 \*Science Fair, International  
(Science Service - Service Clubs of America,  
Washington, D.C.)

20.01 30 00 00 Social Studies Club  
(May involve various aspects of social sciences/  
social studies) (For a description of subject matter see  
15.00 00 00 00 SOCIAL SCIENCES/SOCIAL  
STUDIES.)

20.01 31 00 00 Speech Club  
(For a description of subject matter see  
05.00 00 00 00 ENGLISH LANGUAGE ARTS,  
05.05 00 00 00 *Speech*.)

20.01 32 00 00 \*Student Nurses Association  
(National Student Nurses Association, New  
York, N.Y.)

20.01 33 00 00 \*Vocational Industrial Clubs of  
America  
(Vocational Industrial Clubs of America, Falls  
Church, Virginia.)

20.01 34 00 00 \*Voice of Democracy  
(Veterans of Foreign Wars, Kansas City, Mis-  
souri.)

20.01 35 00 00 Young Farmer Association  
(Sponsored by various State departments of  
education.)

20.01 99 00 00 Other Academic Cocurricular Activi-  
ties

Include here other academic cocurricular activi-  
ties which are emphasized and are not listed above.  
(Specify.)

## 20.02 00 00 00 ATHLETIC AND SPORT COCUR- RICULAR ACTIVITIES

Subject matter and/or activities, usually not pro-  
vided in regular classes, designed for pupils who wish to  
pursue satisfying individual/group interests growing out  
of various aspects of physical education. Frequently  
emphasized are opportunities for pupils to develop  
muscles, motor skills, and physical and mental fitness  
in competitive situations; knowledge, attitudes, and  
judgment essential to individual and group health and  
safety; enjoyment; and desirable citizenship. In prac-  
tice, these activities usually are planned for enriching  
the regular classes and the lives of the pupils.

The code number and title of the subject-matter  
area 08.00 00 00 00 HEALTH AND SAFETY IN  
DAILY LIVING, PHYSICAL EDUCATION, AND  
RECREATION are not used in the references in  
the athletic and sport cocurricular activities. Cross-  
references to items in the above subject-matter area  
cite only the code number and title of the appropriate  
items or category in which the item is classified.

20.02 01 00 00 Aquatics  
(See the category 08.03 02 00 00 *Aquatics*.)

20.02 02 00 00 Archery  
(See the category 08.03 06 00 00 *Individual and Dual Sports.*)

20.02 03 00 00 Badminton  
(See the category 08.03 06 00 00 *Individual and Dual Sports.*)

20.02 04 00 00 Baseball  
(See the category 08.03 09 00 00 *Team Sports.*)

20.02 05 00 00 Basketball  
(See the category 08.03 09 00 00 *Team Sports.*)

20.02 06 00 00 Bowling  
(See the category 08.03 06 00 00 *Individual and Dual Sports.*)

20.02 07 00 00 Cheerleading  
This activity is not described here because of the common understanding associated with it.

20.02 08 00 00 Cross Country  
(See the category 08.03 09 00 00 *Team Sports.*)

20.02 09 00 00 Field Hockey  
(See the category 08.03 09 00 00 *Team Sports.*)

20.02 10 00 00 Football  
(See the category 08.03 09 00 00 *Team Sports.*)

20.02 11 00 00 Girls' Athletic Association  
A voluntary association for girls designed to provide opportunities for them to participate in a variety of physical activities such as sports.

20.02 12 00 00 Golf  
(See the category 08.03 06 00 00 *Individual and Dual Sports.*)

20.02 13 00 00 Gymnastics  
(See the category 08.03 08 00 00 *Stunts, Tumbling, and Gymnastics.*)

20.02 14 00 00 Riflery  
Activity involving the use of selected firearms for shooting at specified target from various positions,

e.g., prone, sitting, kneeling, and standing. Riflery may be competitive or noncompetitive, and may be organized on an individual or team basis.

20.02 15 00 00 Snowskiing  
(See the category 08.03 07 00 00 *Outdoor Recreational Activities.*)

20.02 16 00 00 Soccer  
(See the category 08.03 09 00 00 *Team Sports.*)

20.02 17 00 00 Softball  
(See the category 08.03 09 00 00 *Team Sports.*)

20.02 18 00 00 Tennis  
(See the category 08.03 06 00 00 *Individual and Dual Sports.*)

20.02 19 00 00 Track and Field  
(See the category 08.03 06 00 00 *Individual and Dual Sports.*)

20.02 20 00 00 Twirlers (Baton)  
This activity is not described here because of the common understanding associated with it.

20.02 21 00 00 Volleyball  
(See the category 08.03 09 00 00 *Team Sports.*)

20.02 22 00 00 Wrestling  
(See the category 08.03 06 00 00 *Individual and Dual Sports.*)

20.02 99 00 00 Other Athletic and Sport Cocurricular Activities  
Include here other athletic and sport-cocurricular activities which are emphasized and are not listed above. (Specify.)

### 20.03 00 00 00 MUSIC COCURRICULAR ACTIVITIES

Subject matter and/or activities, usually not provided in regular classes, designed for pupils who wish to pursue satisfying individual/group interests growing out of various aspects of music. Most music cocurricular activities are planned to provide opportunities for pupils to develop appreciations, enjoyment, knowledge, and skills in selected areas of music in group situations or individually. In practice, these activities

20 COCURRICULAR ACTIVITIES—  
(Continued)

usually are organized for enriching the regular class-work and the lives of the pupils.

20.03 01 00 00 Combo

An abbreviation of "combination" denoting, usually, an instrumental group of four to eight players. A combo may improvise on standard tunes, as in Dixieland style; play "head arrangements" (i.e., those worked out and memorized in advance); or play from written arrangements.

20.03 02 00 00 Concert Band

(See 12.00 00 00 00 MUSIC,  
12.05 00 00 00 *Band.*)

20.03 03 00 00 Dance Band

An instrumental group, usually comprising nine to seventeen pieces, including reeds (saxophones and clarinets), brass (trumpets and trombones), and percussion (e.g., drums, bongoes, piano, and vibraharp). Occasionally, other instruments such as flute or horn are added. The dance band plays not only for dances, but also for other entertainment activities.

20.03 04 00 00 Drum and Bugle Corps

A military-type unit comprised of side drums, brass drums, other percussion instruments such as cymbals, and a variety of keyed bugles. Usually, the drum and bugle corps performs on the march, but may play from a fixed position.

20.03 05 00 00 Marching Band

(See 12.00 00 00 00 MUSIC,  
12.05 01 00 00 *Band.*)

20.03 06 00 00 Pep Band

A unit, smaller than the marching band, which performs at various athletic events. Usually, it features a variety of antics designed to keep the participants and spectators at the event in a high state of excitement.

20.03 07 00 00 Choir

(See 12.00 00 00 00 MUSIC,  
12.04 01 00 00 *Choir, Chorus, and/or Glee Club.*)

20.03 08 00 00 Chorus

(See 12.00 00 00 00 MUSIC,  
12.04 01 00 00 *Choir, Chorus, and/or Glee Club.*)

20.03 09 00 00 Instrumental Ensemble

(See 12.00 00 00 00 MUSIC,  
12.05 03 00 00 *Small Instrumental Ensembles.*)

20.03 10 00 00 Vocal Ensemble

(See 12.00 00 00 00 MUSIC,  
12.04 03 00 00 *Small Vocal Ensembles.*)

20.03 11 00 00 Glee Club

(See 12.00 00 00 00 MUSIC,  
12.04 01 00 00 *Choir, Chorus, and/or Glee Club.*)

20.03 12 00 00 Music Production

The creation of musical performances—instrumental, vocal, or a combination of instrumental and vocal—having esthetic qualities. Muscial productions frequently include performances as operettas, music festivals, band concerts, symphony concerts, and vocal concerts. Music productions usually are designed to provide opportunities for pupils to participate voluntarily for personal enjoyment and/or improvement of vocal or instrumental skills.

20.03 13 00 00 Orchestra

(See 12.00 00 00 00 MUSIC,  
12.05 02 00 00 *Orchestra.*)

20.03 99 00 00 Other Music Cocurricular Activities

Include here other music cocurricular activities which are emphasized and are not listed above. (Specify.)

20.04 00 00 00 SCHOOL AND/OR PUBLIC SERVICE COCURRICULAR ACTIVITIES

Activities organized for pupils who wish to pursue satisfying individual/group interests concerned with providing various types of assistance (service) to teachers, pupils, and others, including the community—individually, in small groups, or in large groups. Usually, these activities are designed to provide opportunities for pupils to: develop understanding and acceptance of responsibilities involved in serving others; develop desirable habits in citizenship and cooperation; gain knowledge and skills in selected interests; and enrich personal lives through the constructive use of time.

20.04 01 00 00 Audiovisual Assistant

A service activity providing opportunities for pupils to develop and extend their interests, knowledge, and skills concerned with audiovisual materials

and equipment. Audiovisual assistants aid teachers/pupils in or by: preparing various types of materials, e.g., splicing films, preparing transparencies, and making feltboard materials; procuring, setting up, operating, and returning and storing projection equipment; and cleaning and maintaining equipment and materials.

#### 20.04 02 00 00 Class Officer

A service activity providing opportunities for groups of pupils, e.g., a class or a homeroom, to learn and practice the principles of democratic processes involved in interactions of individuals within a group, among groups within a school, and with the school staff.

Usually, class officers are elected by the group to: preside over group-interest discussions; represent the class in meetings and cooperation with other school groups and the school staff; and provide leadership compatible with school and school system policies. Emphasized are parliamentary procedures, the roles of the minority and majority, techniques of group decisionmaking, fair play, and other related factors.

#### 20.04 03 00 00 Film Projectionist

A service activity providing opportunities for pupils to develop and extend their interests, knowledge, and skills concerned with audiovisual projection equipment. The film projectionist aids pupils/teachers by procuring, setting up, operating, and returning and storing various types of projectors.

#### 20.04 04 00 00 Laboratory Assistant

Opportunities provided for pupils—knowledgeable in the course and related laboratory equipment, materials, and activities involved—to extend their interests, knowledge, and skills by assisting other pupils (under the supervision of the teacher) in procuring, setting up, and using laboratory materials and equipment involved in their study.

#### 20.04 05 00 00 Library Assistant

A service activity providing opportunities for pupils to develop and extend their interests, knowledge, and skills (under supervision of the librarian) by performing many library tasks such as charging books to borrowers, slipping and shelving returned books, repairing books, and typing book cards, envelopes, and overdue notices.

#### 20.04 06 00 00 \*National Junior Red Cross

(American National Red Cross, The, Washington, D.C.)

#### 20.04 07 00 00 \*National Student Traffic Safety Program

(National Commission on Safety Education (NEA), Washington, D.C.)

#### 20.04 08 00 00 Office Assistant

A service activity designed for pupils to gain experience and develop and extend their interests, knowledge, and skills in office activities. Opportunities are provided for interested pupils to serve the staff, other pupils, and the community by assisting with routine duties in the principal's and other offices.

#### 20.04 09 00 00 Poster and Display Club

(For a description of subject matter see 02.00 00 00 00 ART, the major category 02.02 00 00 00 *Art Studio* and 17.00 00 00 00 TRADE AND INDUSTRIAL OCCUPATIONS, 17.07 00 00 00 *Commercial Art Occupations*.)

#### 20.04 10 00 00 School Newspaper Photographer

(For a description of the subject matter see 02.00 00 00 00 ART, 02.02 07 00 00 *Photography and Related Media*; 10.00 00 00 00 INDUSTRIAL ARTS, 10.07 02 00 00 *Photography*; and 17.00 00 00 00 TRADE AND INDUSTRIAL OCCUPATIONS, 17.07 00 00 00 *Commercial Photography Occupations*.)

#### 20.04 11 00 00 School Service Club

(Includes guides for visitors, and ushers) A service activity designed to provide pupils an opportunity to develop citizenship responsibilities by serving their school—as guides to visitors, ushering at school events, orienting new pupils entering the school, maintaining bulletin boards, and related activities.

#### 20.04 12 00 00 \*Student Council, National Association of

(National Association of Student Councils (NEA), Washington, D.C.)

#### 20.04 13 00 00 \*Student Patrol

(American Automobile Association and Affiliated Auto Clubs, Washington, D.C.)

#### 20.04 14 00 00 Student Union and/or Student Activity Center

Service activities designed to provide opportunities for pupils to develop knowledge and skills in serving other pupils who wish to use their nonclassroom time productively. Examples of these activities

20 COCURRICULAR ACTIVITIES--  
(Continued)

are the school newspaper, assisting in pupil-personnel functions, and community relations.

20.04 99 00 00 Other School and/or Public Service  
Cocurricular Activities

Include here other school and/or public service activities which are emphasized and are not listed above. (Specify.)

20.05 00 00 00 SOCIAL COCURRICULAR AC-  
TIVITIES

Activities organized for pupils who wish to pursue satisfying interests growing out of social experiences. These activities are planned to develop social knowledge, skills, understanding, citizenship, and acceptance and constructive use of responsibilities in group situations. In practice, these experiences are designed to provide enrichment in the constructive use of personal talent and time.

20.05 01 00 00 \*Boy Scouts of America  
(Boy Scouts of America, National Council, New Brunswick, N.J.)

20.05 02 00 00 \*Camp Fire Girls  
(Camp Fire Girls, Incorporated, New York, N.Y.)

20.05 03 00 00 Creative Dance  
(For a description of subject matter see 08.00 00 00 00 HEALTH and SAFETY in DAILY LIVING, PHYSICAL EDUCATION, and RECREATION, the category 08.03 04 00 00 *Dance, Rhythms, and Dramatic Activities.*)

20.05 04 00 00 \*Cub Scouts (Boy Scouts of America)  
Boy Scouts of America, National Council, New Brunswick, N.J.)

20.05 05 00 00 Folk Music Club  
A club designed to provide opportunities for pupils to develop social skills and extend their interests and improve their understanding, knowledge, and skills in folk music. Frequently included are activities such as exploring various types of folk music, discussing and exchanging ideas about it; listening to recordings; individual and group vocal and/or instrumental performance; and studying various cultures.

0.05 06 00 00 Girls' Recreation Association

An association planned for girls to provide opportunities for them to develop social skills and to extend individual group interests and improve their understanding, knowledge, and skills through participation in various forms of recreation. Frequently included are activities such as outdoor recreation, arts and crafts, hobbies, and performing arts.

20.05 07 00 00 \*Girl Scouts of the U.S.A.  
(Girl Scouts of the U.S.A., New York, N.Y.)

20.05 08 00 00 \*Hi-Y  
(Young Men's Christian Associations of the U.S.A., National Council of, New York, N.Y.)

20.05 09 00 00 Hobby Club  
A club designed to provide opportunities for pupils to develop social skills and to extend their interests and improve their understanding, knowledge, and skills in various hobbies. Frequently included are activities such as exploring various hobbies; discussing and exchanging information and ideas; and developing and displaying various hobby items.

20.05 10 00 00 \*Junior Hi-Y  
(Young Men's Christian Associations of the U.S.A., National Council of, New York, N.Y.)

20.05 11 00 00 \*Junior Tri-Hi-Y  
(Young Men's Christian Associations of the U.S.A., National Council of, New York, N.Y.)

20.05 12 00 00 Stamp Club  
A club designed to provide opportunities for pupils to develop social skills and to extend their interests and improve their understanding, knowledge, and skills in the collection of postage stamps (philately). Frequently included are such activities as studying the science of philately; discussing and exchanging information and ideas; and developing and displaying collections of postage stamps.

20.05 13 00 00 \*Tri-Hi-Y  
(Young Men's Christian Associations of the U.S.A., National Council of, New York, N.Y.)

20.05 14 00 00 \*Y.M.C.A.  
(Young Men's Christian Associations of the U.S.A., National Council of, New York, N.Y.)

20.05 15 00 00 \*Y-Teens

(Young Women's Christian Associations of the U.S.A., National Board of, New York, N.Y.)

20.05 16 00 00 \*Y.W.C.A.

(Young Women's Christian Associations of the U.S.A., National Board of, New York, N.Y.)

20.05 99 00 00 Other Social Cocurricular Activities

Include here other social cocurricular activities emphasized which are not listed above. (Specify.)

## SAFETY AND DRIVER EDUCATION

21.00 00 00 00

The subject matter and related activities in safety and driver education are organized for carrying on learning experiences concerned with developing in the learner the ability to respond appropriately and efficiently in the operation of a motor vehicle, and as a pedestrian in traffic. More specifically, instruction emphasizes attainment of the following objectives:

(1) appropriate knowledge and efficiency for living in the total traffic environment;

(2) fundamental driving skills and correct skill habits;

(3) desirable behavior pattern in traffic;

(4) an understanding of driver and pedestrian limitations, obligations, and responsibilities legally and socially; and

(5) knowledge about the motor vehicle and understanding of how society may achieve maximum efficiency in operating its motor vehicle transportation system.

Subject matter and activities in safety education are primarily concerned with enhancing personal characteristics and values involved in preventing accidents and saving lives. Instruction emphasizes, in addition to other factors, the following: (1) the development of appropriate attitudes towards safety, (2) knowledge concerning a wide range of safety factors, (3) habits and skills involved in safeguarding oneself and others, and (4) effective citizenship.

The following rationale was applied to the selection of items for placement in the Safety and Driver Education subject-matter area: (1) the content items were determined to be appropriate to the area; (2) subject-matter items could be defined in brief form using only salient descriptive elements; and (3) the various items were identifiable by titles which were considered as being most commonly used.

Opportunities are frequently provided both during and outside regular classtime for pupils to develop interests, skills, and knowledge in selected aspects of safety and driver education as an integral part of the instructional program. As an example, the Student Patrol provides additional opportunities to pursue personal interests, apply various acquired skills in traffic safety, increase knowledge in selected aspects of safety education, and develop leadership qualities through safety patrol activities. Such organized activities, under appropriate supervision, are referred to as *cocurricular activities*. A variety of activities is identified under 20.00 00 00 00 Cocurricular Activities in chapter 5 beginning on page 146; and they are described more fully in this chapter beginning on page 242. As an illustration, the Student Patrol is identified for reporting purposes under Cocurricular Activities as Item 20.04 13 00 00.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples see the items classified in the X 07 00. Series—Evaluation and Curriculum Improvement on pages 71–78, and the items classified in the X 32 00. Series—School Services Supporting Instruction on pages 90–96. Graphic illustrations of these relationships are shown in table 7 on page 11 and figure 2 on page 13.

Included under this heading are the items of information which identify various aspects of subject matter and learning activities in driver and safety education.

### 21.01 00 00 00 DRIVER EDUCATION

Learning experiences provided by the school for the purposes of helping pupils to become good traffic citizens and to operate motor vehicles safely and efficiently. The typical high school course consists of both classroom instruction and practice driving which provide learning experiences in a dual-control car.

#### 21.01 01 00 00 Alcohol, Drugs, other Harmful Substances and Driving

Learning experiences and activities designed to help pupils understand the effects of harmful substances as they relate to the driving task.

#### 21.01 02 00 00 Characteristics of Drivers

The study of the physical, mental, and emotional characteristics of the driver and their effects upon his driving.

#### 21.01 03 00 00 Development of Judgment



## 21 SAFETY AND DRIVER EDUCATION— (Continued)

Learning experiences designed for classroom and laboratory instruction dealing with the relationship of vision and perception, knowledge, physical laws and their application to formulating judgment, including the analysis of traffic situations and decisionmaking as they relate to drivers of other vehicles and to pedestrians.

### 21.01 04 00 00 Driving Skills (Behind-the-wheel Driving)

Laboratory experiences planned to help the pupil develop basic skills (and competencies) in starting and stopping, turning, executing special maneuvers, and driving under hazardous conditions involving expressways, parking, open-highway driving, and emergency situations.

### 21.01 05 00 00 Simulation Driving Experience

A combination of subject matter (including special films) and experiences involving the use of electromechanical devices for enhancing subsequent in-car instruction. Simulator instruction assists in developing basic skills related to performance and helps to develop perceptual and judgmental proficiencies.

### 21.01 06 00 00 Engineering

A study of the functions and responsibilities of the automotive engineer, highway engineer, and traffic engineer.

### 21.01 07 00 00 Laws and Ordinances of Enforcement

A study of local and State laws and ordinances, the Uniform Vehicle Code, and Model Traffic Ordinances and their relationship to law enforcement.

### 21.01 08 00 00 Motor Vehicle, The

Learning experiences including laboratory activities concerned with the mechanics of the vehicle, including the powerplant, gauges and indicators, and safety and control devices. Also emphasized are the economics of vehicle ownership, trip planning, and the possibility of vocational opportunities.

### 21.01 09 00 00 Traffic Accidents

A study of the literature, socioeconomic factors, human elements, roads, and vehicles as they relate to the traffic accident problem.

### 21.01 10 00 00 Traffic Citizenship

Learning experiences and activities concerned with the driver's responsibility to other drivers and highway users, to himself, to the community, and to the support of public officials.

### 21.01 99 00 00 Other Driver Education

Include here other organized subject matter and experiences emphasized in driver education which are not listed above. (Specify.)

## 21.02 00 00 00 SAFETY EDUCATION

A combination of subject matter and experiences directed toward the conservation of human and material resources. The learning environment provided is such that pupils may acquire knowledge and behavioral patterns conducive to efficient and safe living.

### 21.02 01 00 00 Civil Defense

Planned learning activities involving the preparation of pupils to meet both man-made and natural disasters. Natural disasters may include tornadoes, floods, blizzards, and hurricanes. Man-made disasters may include fire explosions, large-scale air or water pollutants, transportation accidents, construction disasters, and air-bombing attacks.

### 21.02 02 00 00 Explosives

The study of various kinds of explosives, including fireworks, flammable liquids and gases, blasting caps, dynamite, rockets, and various types of ammunition. Also emphasized are legal requirements and related safety factors. (Included as 08.02 01 00 00 *Explosives* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)

### 21.02 03 00 00 Law, Liability, and Responsibility

A study of the legal aspects of safety education including State and local statutes pertaining to the safe operation of schools, curriculum requirements, responsibilities of State and local school administrators, liability suits and liability areas, legal terminology, legal defense, insurance protection, and teacher and school liability.

### 21.02 04 00 00 Personal Responsibility in Unsupervised Activities

(For definition see 08.02 05, 00 00 *Personal Responsibility in Unsupervised Activities*, under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)

21.02 05 00 00 Safety in the Home

(For definition see 08.02 06 00 00 *Safety in the Home* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)

21.02 06 00 00 School Safety

(For definition see 08.02 08 00 00 *School Safety* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)

21.02 07 00 00 Traffic Safety

A study of the basic elements of the traffic problem, including the driver, the roadway, and the vehicle. The basic essentials for the safe and efficient operation of a motor vehicle are considered in the light of attitudes and habits to be developed, and the knowledge and skills to be learned. (Included as 08.02 09 00 00 *Traffic Safety* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.) The traffic safety program is also considered as it relates to:

21.02 07 01 00 Bicycle, Motor Bike, other

Learning activities and experiences concerned with safety factors in bicycling, including selecting a bicycle, keeping a bicycle in proper condition, practices of safe bicycle riding, and community cooperation for safe bicycling. The same learning activities and experiences are applicable to motorcycles, scooters, and motor-driven bicycles. (Included as 08.02 09 01 00 *Bicycle, Motor Bike, other* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)

21.02 07 02-00 Passenger

Learning activities and experiences concerned with safety factors when riding in a passenger car or taxi, a school bus, public conveyance, a train, a boat, and an airplane. (Included as 08.02 09 02 00 *Passenger* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)

21.02 07 03 00 Pedestrian

Learning activities and experiences concerned with pedestrian practices in traffic, on rural roads and in cities, proper crossing procedures, and obeying traffic signs and signals. Included in instruction are situations where there are no sidewalks, wearing proper clothing, proper routes to and from

school, and obeying student safety patrols. (Included as 08.02 09 03 00 *Pedestrian* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)

21.02 07 04 00 Student Patrol

Learning activities and experiences concerned with the organization, supervision, structure, and functions of various school patrols including traffic, hall or school, school bus, playground, fire drill, and civil defense. (Included as 08.02 09 04 00 *Student Patrol* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)

21.02 07 99 00 Other Traffic Safety

Include here other organized subject matter and experiences emphasized in traffic safety which are not listed above. (Specify.)

21.02 08 00 00 Vocational and Occupational Safety  
(For definition see 08.02 10 00 00 *Vocational and Occupational Safety* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)

21.02 99 00 00 Other Safety Education

Include here other organized subject matter and experiences emphasized in safety education which are not listed above. (Specify.)

## JUNIOR ROTC

### 22.00 00 00 00

Junior ROTC is comprised of a body of subject matter, or combinations of courses and practical experience, organized into programs of instruction to provide opportunities for pupils to prepare for and achieve career objectives in selected branches of the military service. In the instructional process various aspects of subject matter frequently are drawn from other subject-matter areas.

Instruction is concerned with developing (1) good citizenship, patriotism, self-reliance, leadership, and responsiveness to constituted authority; (2) knowledge of basic military skills and appreciation of the role of the military services in military defense; and (3) informed citizens, strength of character, and understanding of the responsibility of citizens in a democratic society.

The following rationale was applied to the selection

## 22 JUNIOR ROTC--(Continued)

of the items for placement in the Junior ROTC area: (1) the various items selected and classified were determined as including the aspects of Junior ROTC most commonly taught; (2) the items could be defined in brief form using only salient descriptive elements; and (3) the various items classified were identified by titles that are considered to be in current use in Junior ROTC.

Many items of information in chapters 3 and 4 are supportive to pupils, instructional staff, and subject matter in the instructional program. For examples, see the items classified in the X 07 00. Series--Evaluation and Curriculum Improvement on pages 71-78, and the items classified in the X 32 00. Series--School Services Supporting Instruction on pages 90-96. Graphic illustrations of these relationships are shown in table 7 on page 11 and in figure 2 on page 13.

The following items of information identify substantive content, specialized experiences, and career objectives emphasized in Junior ROTC.

### 22.01 00 00 00 ARMY JUNIOR ROTC

Organized subject matter and learning activities which are concerned with the development in each cadet (1) attributes of good citizenship and patriotism, (2) self-reliance, leadership, responsiveness to constituted authority, and (3) a knowledge of the basic military skills and appreciation of the role of the U.S. Army in national defense.

### 22.01 01 00 00 Introduction to ROTC/NDCC and Military Organization

The study of the purpose and objectives of the ROTC/NDCC program, including benefits that students may receive by participation in ROTC. Included in instruction are the history and background of ROTC/NDCC, with emphasis on the local ROTC unit and its history, organization, traditions, awards, and decorations. Attention is given to orientation concerning the cadet uniform and insignia, including proper wear, care, and maintenance of the uniform. The basic theory of military organization with emphasis on unity of command and chain of command, its structure, flexibility, and the concept of tailored forces, is also emphasized.

### 22.01 02 00 00 Leadership

Planned learning activities designed to provide for leadership training, drill experience, and the development of certain essential characteristics of leader-

ship such as initiative and self-confidence through progressive training in the school of the soldier and exercise of command. Subject matter and experiences are planned to develop in the student qualities of courtesy and discipline, habits of correct posture, precision in execution of drill movements, and response to a leader's orders; and provide practical experience in the duties and conduct of officers and noncommissioned officers in the exercise of command. Consideration is given to the similarity between leadership in military and civilian life and the necessity for responsiveness to constituted authority in both environments.

### 22.01 02 01 00 Courtesies, Customs, and Rules of Conduct

Subject matter and experiences concerned with military courtesy, customs, and rules of conduct; salutes, terms of address and titles, and insignia of grade; honors to the National Anthem and to the flag, including display and care of the flag; personal honor and integrity; courtesies to individuals; and origins of customs. General indoctrination in traditions of the Army and pride in the uniform, military justice and the unit commander, and the Code of Conduct are emphasized.

### 22.01 02 02 00 Leadership, Drill, and Exercise of Command

Learning experiences designed for the soldier with and without arms. Drill for foot troops including squad, platoon, and company drill is emphasized, as are wearing, caring for, and maintaining the uniform. Duties and responsibilities of leaders and the individual soldier during ceremonies, parades, reviews, escorts, inspections, and regular drill periods and the development of command voice are studied and practiced. Preparation for and conduct of formal inspections in ranks and barracks are provided, as appropriate, with and without personal field equipment. Particular emphasis is placed on proper methods of instruction and supervision of physical training, e.g., organized athletics such as softball, volleyball, swimming, tennis, and such other sports as are permitted by local conditions and available time.

### 22.01 02 03 00 Psychology of Leadership

An introductory course in leadership which emphasizes principles of leadership, leadership traits and techniques, response to leadership, human behavior, and adjustment to regimentation.

22.01 02 04 00 Principles of Leadership

Subject matter concerned with responsibilities and basic qualities of a leader, objectives of leadership, leadership principles and techniques, functions of the leader, and special problems of military leadership.

22.01 02 99 00 Other Leadership

Include here other organized subject matter and experiences emphasized in leadership which are not listed above. (Specify.)

22.01 03 00 00 Hygiene and First Aid

The study of elementary personal hygiene, general hygiene rules, body care and cleanliness, necessity of routine habits in daily bodily functions, care of the feet, and regular physical examinations. Personal hygiene and individual health rules in the field, insect control and prevention of insect bites, cleansing of eating utensils, improvised washing and bathing facilities, waste disposal, march hygiene and camp sites, and field water supplies are emphasized. Instruction includes responsibilities of leaders in matters of health control, dressing and protection of wounds, prevention of infection, control of hemorrhage, prevention of shock, control of pain, use of first-aid kit and packet, applicatory exercises in bandaging, artificial respiration, and first aid for common emergencies. Opportunities are provided for study and practice in first aid for poisons, snake bites, insect bites, heat exhaustion and heat stroke, and manually carrying the sick and wounded.

22.01 04 00 00 Weapons

Instruction which provides for detailed study of latest standard individual and crew-served weapons.

22.01 04 01 00 Individual Weapons

Instruction which provides for detailed study of the latest standard individual weapons. Emphasis is given to rifle 7.62mm, M14 or U.S. rifle caliber .30 M1, including descriptions, characteristics, disassembly and assembly, operations, functioning, spare parts, accessories, ammunition, and care and cleaning. Familiarization with caliber .45 pistol, rifle 5.56mm M16, and hand and rifle grenades, machinegun 7.62mm, M60 and machinegun caliber .30 M1919A6 is provided.

22.01 04 02 00 Crew-served Weapons

Subject matter and experiences concerned with light crew-served weapons, including characteris-

tics, general data, disassembly, assembly, and functioning. Instruction provides for familiarization with the 40mm grenade launcher M79, 3.5-inch rocket launcher, 66mm HEAT Rocket, M72, and/or other latest standard crew-served weapons. Classes on standard crew-served weapons, including mortars and antitank weapons with emphasis on the 81mm mortar and the 90mm and 106mm recoilless rifles, and characteristics, capabilities, and types of ammunition are conducted.

22.01 04 99 00 Other Weapons

Include here other organized subject matter and experiences emphasized in weapons which are not listed above. (Specify.)

22.01 05 06 00 Marksmanship

Subject matter and experiences concerned with principles of marksmanship, demonstrations, student participation in sighting and aiming, positions, trigger squeeze, sling adjustment, range procedure, and safety precautions. Range practice with the .22 caliber rifle and matches and competition with the .22 caliber rifle are conducted as applicable.

22.01 06 00 00 American Military History

Subject matter designed to provide a brief resume of important U.S. Army campaigns and battles, achievements and traditions of the U.S. Army, biographical sketches of prominent Army leaders, past and present, examples of personal heroism and unit gallantry in the U.S. Army, and famous mottoes, slogans, and colorful traditions of units. Contributions of the Army to the Nation such as defense of the country, western exploration, and scientific and medical contributions are emphasized, including the "citizen soldier" tradition, and the role of the soldier in a democracy.

22.01 07 00 00 Small Unit Tactics: Infantry

An organization of subject matter designed to teach the students basic tactics of small infantry units, to instruct in individual training of the infantry soldier, and to impart the principles and fundamentals of small unit tactics.

22.01 07 01 00 Individual

Subject matter and experiences concerned with the tactical training of the individual soldier. Included for study are organization of the rifle platoon with emphasis on the rifle squad; scouting and patrolling, day and night; individual protection of the soldier; elementary camouflage; and techniques of fire.



1.0



1.1



1.25



1.4



1.6

1.8  
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2.8  
3.2  
3.6  
4.0



2.8



3.2



3.6



4.0



2.5



2.2



2.0



1.8

MICROCOPY RESOLUTION TEST CHART

## 22 JUNIOR ROTC--(Continued)

### 22.01 07 02 00 Squad

Subject matter and experiences concerned with squad tactics. Instruction emphasizes organization of the rifle platoon, particularly the rifle squad; scouting and patrolling, day and night; elementary camouflage; squad formations; techniques of fire of the squad; and the rifle squad in the attack and defense.

### 22.01-07 03 00 Platoon

The study of the organization of the infantry company with emphasis on the rifle platoon, the rifle platoon in the attack and defense, platoon formations, and battle drill.

### 22.01 07 04 00 Company

The study of the company in the attack and defense. Tactical control measures and principles of defense, estimate of the situation, operations orders, and troop-leading procedures are included in instruction.

### 22.01 07-05 00 Battalion

The study of the organization of the infantry battalion with emphasis on the rifle company. The combined arms team, tactical control measures and principles of defense, estimate of the situation, operations orders, and troop-leading procedures are all emphasized in instruction.

### 22.01-07 99 00 Other Small Unit Tactics: Infantry

Include here other organized subject matter and experiences emphasized in small unit tactics, infantry, which are not listed above. (Specify.)

### 22.01 08 00 00 Map and Terrain Analysis

An introduction to map and terrain analysis. Instruction is concerned with marginal information, conventional signs and military symbols, grid coordinates, location and direction, azimuths, use of compass, scale and distance, and elevation and relief; location by intersection and resection; preparation of overlays; and introduction to aerial photograph reading.

### 22.01 09 00 00 Military Teaching Methods

Subject matter designed to provide an introduction to military teaching methods, including the stages of instruction and the importance of each. Techniques used in planning and instruction, speech techniques, the construction and use of lesson plans

and training aids, and the construction and use of tests to evaluate training are emphasized.

### 22.01 10 00 00 New Development

Organized subject matter and experiences concerned with current unclassified developments in organization, tactics, weapons, techniques, and materiel of the Army.

### 22.01 11 00 00 Military Service: Opportunities, Obligations, and Benefits

The study and analysis of the Senior ROTC Program, including scholarship opportunities; the National Guard, the Army Reserve, and the Regular Army; and opportunity for an officer or enlisted career in the Regular Army.

### 22.01 12 00 00 Counterinsurgency

Subject matter organized to provide an introduction to counterinsurgency, including a brief analysis of the nature of insurgency, its environment, its prerequisites, the threat it constitutes, and motivation of the individual insurgent. Methods of combating insurgency and the Army's role in counterinsurgency are also studied.

### 22.01 13 00 00 Branches of the Army

Study concerned with the general mission and role of the various branches of the Army. The combat arms team, and the supply, service, and maintenance contribution of the technical and administrative services in furnishing combat service support to the field Army are emphasized.

### 22.01 14 00 00 Communication

A combination of subject matter and activities concerned with the methods and techniques of communications, including messenger, wire, radio, visual, and sound; basic wire communication and equipment; basic radio communication and equipment; and radio procedure. The importance of communications in combat operations is stressed in instruction.

### 22.01 15 00 00 Methods of Instruction

Subject matter designed to provide a thorough review of military teaching methods. Actual instruction is given by cadets with emphasis on the U.S. Army and its role in national security.

### 22.01 99 00 00 Other Army Junior ROTC

Include here other organized subject matter and experiences emphasized in Army Junior ROTC which

are not listed or classifiable in one of the above categories. (Specify.)

### 22.02 00 00 00 NAVY JUNIOR ROTC

One of the military service branches directed by Section 2031, Title 10, United States Code, to establish JROTC Units at public and private secondary institutions. The three-year program (sophomore, junior, and senior high school years) follows NAVPERS curriculums with the following objectives: to develop informed citizens, strengthen character, promote an understanding of the military responsibilities of citizens in a democratic society, and develop an appreciation of the U.S. Navy and the role of sea power in the national defense.

### 22.02 01 00-00 Naval Science I

Subject matter and experiences provided in grade 10 with emphasis on topics such as Naval Orientation, Naval History, Customs, and Traditions, Importance of Sea Power, and Our Modern Navy, including United States History from a Navy viewpoint. Also included is an introduction to Drills, Commands, and Ceremonies.

### 22.02 01 01 00 Drills, Commands, and Ceremonies

The study of and practical training in the nomenclature, positions, movements, and other aspects of military drill on the squad, platoon, and company levels. Performance may be with or without arms (rifles).

### 22.02 01 02 00 Orientation and Sea Power

The study of the history, customs, courtesies, and organization of the U.S. Navy. Instruction is planned to impress upon the cadet the importance of sea power and the need for a strong modern Navy.

### 22.02 01 99 00 Other Naval Science I Topics

Include here other subject matter and experiences emphasized in Naval Science I which are not listed above. (Specify.)

### 22.02 02 00 00 Naval Science II

Subject matter and experiences provided in grade 11 with emphasis on topics such as science (oceanography and meteorology), navigation (e.g., aids, charts, rules of the nautical road, dead reckoning, and piloting), and Seamanship (marlinspike, deck, and boat). Also included are first aid and more advanced participation in Drills, Command, and Ceremonies. The fundamental skills and knowledge necessary to a man

aboard a navy ship comprise an important part of instruction.

### 22.02 02 01 00 Adventures in Science

The study of the basic facts, concepts, and principles of the branches of science most useful to future naval officers and enlisted personnel in the performance of their duties aboard ship.

### 22.02 02 01 01 Meteorology

(For definition see Earth-Space Sciences, 13.04 03 00 00 Meteorology, under NATURAL SCIENCES.)

### 22.02 02 01 02 Oceanography

(For definition see Earth-Space Sciences, 13.04 04 00 00 Oceanography, under NATURAL SCIENCES.)

### 22.02 02 01 99 Other Adventures in Science Topics

Include here other topics emphasized in the adventures in science which are not listed above. (Specify.)

### 22.02 02 02 00 Drills, Commands, and Ceremonies

(For definition see 22.02 01 01 00 Drills, Commands, and Ceremonies under Naval Science I.)

### 22.02 02 03 00 First Aid

(For definition see 08.01 06 00 00 First Aid under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)

### 22.02 02 04 00 Navigation I

The study of the art/science that enables the mariner to (1) determine his ship's position, and (2) guide her safely from one point to another. Included in instruction are the basic fundamentals of piloting, dead reckoning, electronic navigation, rules of the road, and the use of navigational instruments and aids.

### 22.02 02 05 00 Seamanship

The study of the fundamentals of the art of handling, working, and navigating naval ships and small craft. Included in instruction are the basic fundamentals of boat, deck, and marlinspike seamanship and small craft safety.

### 22.02 02 99 00 Other Naval Science II Topics

Include here other subject matter and experiences emphasized in Naval Science II which are not listed above. (Specify.)

## 22 JUNIOR ROTC--(Continued)

### 22.02 03 00 00 Naval Science III

Subject matter and experiences provided in grade 12 with emphasis on topics such as science (astronomy), navigation (relative motion, bearings, plotting, vector diagrams, and celestial navigation), and electronics (communications, radar, sonar). Also included are leadership and more advanced participation in Drills, Commands, and Ceremonies. An important aspect of instruction is the development of an understanding of the principles of the more technical functions and equipment aboard naval vessels.

### 22.02 03 01 00 Adventures in Science

(For definition see 22.02 02 01 00 *Adventures in Science* under *Naval Service II*.)

### 22.02 03 01 01 Astronomy

(For definition see Earth-Space Sciences, 13.04 01 00 00 *Astronomy*, under NATURAL SCIENCES.)

### 22.02 03 01 99 Other Adventures in Science Topics

Include here other topics emphasized in the adventures in science which are not listed above. (Specify.)

### 22.02 03 02 00 Drills, Commands, and Ceremonies

(For definition see 22.02 01 01 00 *Drills, Commands, and Ceremonies* under *Naval Science I*.)

### 22.02 03 03 00 Electronics

The study of the basic concepts in the field of electronics. Emphasis is placed primarily on the theory of operation of typical electronic devices involved in communications, radar, and sonar.

### 22.02 03 03 01 Communications

Specialized learning experiences in elementary interior and exterior naval communications to develop in the cadet an appreciation of the importance of reliability, security, speed, and the methods employed to achieve them.

### 22.02 03 03 02 Radar

Classroom study of the basic principles for using the electronic device of RADAR (radio detection and ranging) to detect the presence, range, bearing, elevation, and speed of airplanes, ships, and land masses in darkness, fog, or storm.

### 22.02 03 03 03 Sonar

Classroom study of the basic principles for using the electronic device of SONAR (sound navigation and ranging) as underwater sound equipment for submarine detection and navigation.

### 22.02 03 03 99 Other Electronics

Include here other organized subject matter and experiences emphasized in electronics which are not listed above. (Specify.)

### 22.02 03 04 00 Judo

Organized subject matter and experiences concerned with the basic fundamentals of a refined form of jujitsu presented as part of the physical fitness emphasis in the Navy Junior ROTC program.

### 22.02 03 05 00 Leadership

The study and development of understanding concerning the basic essentials of an effective naval leader. Included in instruction are such areas as moral responsibility, loyalty, devotion to duty, self-confidence, initiative and ingenuity, courage, ability to organize and make decisions, and personal example.

### 22.02 03 06 00 Navigation II

An extension of the study of the art of science that enables the mariner to (1) determine his ship's position, and (2) guide her safely from one point to another as described in *Navigation I*. Included for additional study are the basic fundamentals of relative motion, bearings and plotting, vector diagram of speed triangle, intercept solutions, celestial navigation, and other related factors.

### 22.02 03 07 00 Survival

Organized subject matter and experience concerned with the basic fundamentals necessary to the preservation of life in the face of disaster. Emphasis is on survival in the water and the use and care of equipment normally available.

### 22.02 03 99 00 Other Naval Science III Topics

Include here other subject matter and experiences emphasized in Naval Science III which are not listed above. (Specify.)

### 22.02 99 00 00 Other Navy Junior ROTC

Include here other organized subject matter and experiences emphasized in Navy Junior ROTC which are not listed or classifiable in one of the above categories. (Specify.)



## 22.03 00 00 00 AIR FORCE JUNIOR ROTC

A combination of subject matter and experiences involving principles, skills, knowledge, and appreciation concerned with the role of the United States Air Force in national defense. Instruction also emphasizes the development of citizenship, character, leadership, self-reliance, and general knowledge.

## 22.03 01 00 00 Introduction To Aerospace Education

Subject matter and experiences concerned with initial exploration of aerospace factors, including an overview of the development and impact of aerospace, a familiarization with aircraft and spacecraft, an examination of the environment in which such craft operate, and an orientation to the work of the United States Air Force and the customs and courtesies used by its military members.

## 22.03 01 01 00 The Coming of the Aerospace Age

The study of antecedents and early beginnings of aviation and the advent of space exploration; a look at the pioneers of aerospace and their contributions; and the developments that have led to the present state of aerospace technology.

## 22.03 01 02 00 Aerospace and the American People

The study of the impact of the development of aircraft and spacecraft upon the people of the United States and other nations. A resume of the changes that have resulted in the American society and economy, including effects upon education, geography, science, communication, commerce, security, and everyday life is included in instruction.

## 22.03 01 03 00 Aircraft of Today

Subject matter and experiences applied to modern aircraft, e.g., component parts, differences in design and purpose, and basic terms and ideas related to flight and propulsion; the general capabilities of current military and commercial models; and familiarization with military and nonmilitary aircraft to the extent of being able to identify or describe each.

## 22.03 01 04 00 Space and the Universe

The study of space geography and related terminology and concepts. Recent knowledge about neighbors of the earth and ideas for future space travel are emphasized in instruction.

## 22.03 01 05 00 Spacecraft and Launch Vehicles

The study of terminology and general

principles of rocketry and the rockets and missiles now in use, including current and recent space flights and projected ones.

## 22.03 01 06 00 Weather

The study of atmospheric components and phenomena as applied to meteorology and aeronautics, including the nature of forecasting and its importance to aviation and the Air Force, and the evolution of weather technology.

## 22.03 01 07 00 The Air Force Community

The study of the air force base as (1) a military community, including its geography, facilities, and ways of functioning; and (2) the worldwide complex of air bases and the meaning for American society.

## 22.03 01 08 00 Air Force Traditions, Customs, and Flight Drill

Subject matter and experiences designed to help the student become acquainted with the existence and development of Air Force traditions and customs, including United States flag etiquette, the hand salute, respect for authority, principles of honor and integrity, and allegiance to country. Emphasized are appreciation of the need for discipline in military group activities, learning to wear the uniform properly and proudly; and learning individual positions and facing movements, the rank and file maneuvers required to move a formation of flight size, and how to give commands for such actions. Opportunity for demonstration of attained proficiency is provided in instruction.

## 22.03 01 99 00 Other Introduction to Aerospace Education

Include here other organized subject matter and experiences emphasized in the introduction to aerospace education which are not listed above. (Specify.)

## 22.03 02 00 00 Elements of Aerospace Education

Subject matter and experiences designed for the study of selected areas of aeronautics, e.g., examination of the component factors of aerospace power, and the development of individual and group skills sufficient for appropriate participation in Air Force ceremonies.

## 22.03 02 01 00 Theory of Aircraft Flight

Subject matter and experiences concerned with the study of aerodynamic forces as related to

## 22 JUNIOR ROTC--(Continued)

atmospheric properties, including an examination of the structure of the aircraft, its central mechanisms, and its characteristics in flight. The student is introduced to aircraft instruments, preflight, flight, and postflight check procedures.

### 22.03 02 02 00 Propulsion Systems for Aircraft

The study of the factors influencing atmospheric flight through propulsive means. Fuels, machines, component sections of reciprocating engines, jet engines, and rockets are studied. Physical and chemical properties and indices of relative efficiencies are explored. Other functional systems of an aircraft are examined as they relate to aircraft propulsion.

### 22.03 02 03 00 Air Navigation

Subject matter and experiences concerned with exploring the use of maps, charts, and various forms of projections which are basic navigator tools. Pilotage, dead reckoning, and radio navigation are introduced in instruction and practical navigation problems are explored and solved. The role of the Federal Government in providing navigational and communication aids is examined.

### 22.03 02 04 00 Aerospace Industry and Research

The study and analysis of the scope and breadth of aerospace industry: personnel, functions, financial considerations, products, plant locations, and general industrial trends. Emphasis is on the recognition of aerospace power as a combined resultant of all contributing forces, i.e., military air, civilian air, and the supporting facilities, personnel, industries, and educational systems. In the review of research activities and potential, an examination is made of new and projected aircraft developments.

### 22.03 02 05 00 Civilian Aviation and Facilities

An examination of civil air factors, including facilities and their planning, development, and utilization. The need for national coordination and support of Federal agencies is also included. The student examines air carrier organizations with particular attention to scheduled and non-scheduled airlines. Additionally, air-taxis, charter operations, and agricultural, business, and recreational flying are reviewed. Problems of scheduling, safety, sales, tariffs, engine overhauls, franchises, personnel, duties, and long-range programs are covered.

### 22.03 02 06 00 Military Aerospace

Subject matter and experiences designed to help the student become acquainted with the tasks of the Air Force and the capability of Air Force personnel and units in the use or support of strategic, tactical, and defensive weapons systems. In addition to establishing the specific aerospace roles of the Air Force, a review of Army and Navy Air is also included in instruction.

### 22.03 02 07 00 Techniques of Instruction and Ceremonial Drill

Subject matter and experiences concerned with helping students become familiar with the concepts of how to instruct others. Opportunities are provided to apply these concepts in teaching drill skills and the knowledge of ceremonies to beginners in the AFJROTC program. Emphasis is on increasing knowledge and abilities to the point that one can competently participate in squadron-size and larger mass formations. As in the first year, application of attained proficiency is stressed.

### 22.03 02 99 00 Other Elements of Aerospace Education

Include here other subject matter and experiences emphasized in elements of aerospace education which are not listed above. (Specify.)

### 22.03 03 00 00 Aerospaceage Leadership

Subject matter which is designed to provide explanation of space technology and space programs; a review of leadership opportunities in space, national defense, and aerospace preparation; and an analysis of factors and techniques involved in leadership situations.

### 22.03 03 01 00 Space Exploration: Manned and Unmanned Flight

A study of subject matter concerned with the capabilities and restrictions that characterize man in relationship to the total problem of conquest of space. The state of development of the U.S. space program is analyzed in order to determine the degree of progress that has been made and implications for the future. In addition, a careful review is made of the area of peaceful scientific exploration and probes into space.

### 22.03 03 02 00 Space Technology/Propulsion: Guidance and Control Space Vehicles

A semitechnical study of two basic essen-

tials of space technology: (1) and examination of the generally-used propulsion systems as well as a futuristic overview of more sophisticated systems; and (2) the orderly progression from the simple to the more complex systems of guidance and control, with attention to the facilities and organizations involved.

**22.03 03 03 00 International Space Programs**

Study involving summary and discussion of the achievements of other nations in the application of current and future space programs, including the implications for international law. Plans for future U.S. programs are analyzed.

**22.03 03-04 00 Human Factors of Aviation and Space**

Subject matter concerned with the detailed study of the physiological aspects of aviation and flight. The training requirements, selection procedures, and projected needs of the astronaut program are included. Leadership in the aerospace age and the identification of the role and techniques of the leader are critically reviewed, including the identification of future needs for national and international aerospace leadership.

**22.03 03 05 00 The Defense of the United States**

Study involving the examination of national defense structure, including the executive agencies, the Department of Defense, the USAF, the U.S. Navy, the U.S. Army, the U.S. Marines, and the U.S. Coast Guard. Particular attention is devoted to the national aerospace program and the interrelated responsibilities of the agencies mentioned above. Civil defense, its need and functions, is studied with attention given to civilian defense organization at the local level.

**22.03 03 06 00 Aerospace Opportunities for the Individual**

Subject matter concerned with an introduction to the spectrum of vocational and educational opportunities in aerospace work. Civilian and government careers in aerospace are reviewed; the nature of military obligations is examined in relationship to commissioning and enlistment opportunities; and, in particular, the educational and professional challenges of college-level Air Force ROTC are discussed.

**22.03 03 07 00 Aerospace Leadership Application**

Subject matter concerned with leadership techniques that are useful in dealing with fellow students, particularly in AFJROTC. Problem solving

and the analysis of skills valuable in leading others are introduced. Knowledge is applied and experience is provided through occupancy of leadership positions in the cadet organization. The opportunity to improve further the ability to instruct other students is continued through this third year.

**22.03 03 99 00 Other Aerospace Leadership**

Include here other subject matter and experiences emphasized in aerospace leadership which are not listed above. (Specify.)

**22.03 04 00 00 National Security**

The examination and study of the elements of national security, the military organization, and the military in action.

**22.03 04 01 00 Elements of National Security, Part I**

Subject matter designed for a study of the nature and purpose of war, the functions and employment of the United States military forces, and the current prospects and trends in the search for world peace.

**22.03 04 02 00 Elements of National Security, Part II**

Subject matter designed for extending the study of the nature and purpose of war, the functions and employment of the United States military forces, and the current prospects and trends in the search for world peace.

**22.03 04 03 00 The Military Organizations In Action**

A combination of subject matter and skills development designed to provide practical leadership experiences in basic military and officer-type activities.

**22.03 04 99 00 Other National Security**

Include here other subject matter and experiences emphasized in national security which are not listed above. (Specify.)

**22.03 99 00 00 Other Air Force Junior ROTC**

Include here other subject matter and experiences emphasized in Air Force Junior ROTC which are not listed or classifiable in one of the above categories. (Specify.)

**22.04 00 00 00 MARINE CORPS JUNIOR ROTC**

A combination of subject matter and experiences

## 22 JUNIOR ROTC--(Continued)

involving principles, skills, knowledge, and appreciation concerned with the role of the United States Marine Corps in national defense. Instruction also includes the principles and processes of military training, and emphasizes the development of citizenship, character, leadership, self-reliance, and general knowledge.

### 22.04 01 00 00 Military Training I

Basic subject matter and learning activities which are concerned with the principles and processes involved in military training. In practice, activities include classroom instruction and application in and out of school. Aspects of basic military training are organized under a variety of descriptive titles such as History and Traditions of the Marine Corps, Military Organization, and Weapons and Marksmanship.

### 22.04 01 01 00 Introduction to Marine Corps Junior Reserve Officer Training Corps

Subject matter concerned with the purpose and objectives of Marine Corps Junior Reserve Officer Training Corps, its benefits and potentialities, and requirements for advancement. Attention is also given to local awards and decorations, organization of the local unit, wearing of uniform, and cadet insignia of rank.

### 22.04 01 02 00 History and Traditions of the Marine Corps

Subject matter devoted to the basic history and traditions of the Marine Corps from 1775 to the present time.

### 22.04 01 03 00 Military Organization

The study of the underlying theory of Marine Corps organization in simplified form, with emphasis on the following: Necessity for one leader for each unit or subdivision; span of control and the chain of command; assignment of specific duties and responsibilities to all personnel; integration of smaller units into larger teams; and general design of military organization to fit missions to be performed.

### 22.04 01 04 00 Courtesies, Customs, and Rules of Conduct

Subject matter that is concerned with military courtesy, customs, and rules of conduct. Emphasized in instruction are a brief introduction to the punitive address and titles, insignia of grade, and honors to the National Anthem and to the flag; display

and care of the flag; personal honor and integrity; courtesies to individuals; and origin of customs. General indoctrination in pride of the Marine Corps uniform and the traditions of the Marine Corps are also included.

### 22.04 01 05 00 Hygiene

Subject matter which is concerned with elementary personal hygiene, general rules, care of the body, cleanliness, necessity of routine habits in the daily bodily functions, regular physical examinations, and care of the feet. Included in instruction are personal hygiene and individual health rules in the field, insect control and prevention of insect bites, cleansing of eating utensils, improvised washing and bathing facilities, waste disposal, march hygiene and campsites, and field water supplies. Responsibility of the individual leader in matters of health control is emphasized.

### 22.04 01 06 00 First Aid

A combination of subject matter and experiences concerned with dressing and protecting wounds, prevention of infection, control of pain, use of first-aid kit and packet, applicatory exercises in bandaging, artificial respiration, first aid for poisons, snake bites, insect bites, heat exhaustion and heat stroke, and manually carrying the sick and wounded. (See also 08.01 06 00 00 *First Aid* under HEALTH AND SAFETY IN DAILY LIVING, PHYSICAL EDUCATION, AND RECREATION.)

### 22.04 01 07 00 Leadership Drill, and Exercise of Command

Instruction concerned with the definition of and necessity for military discipline. Activities include school of drill for the Marine with and without arms, and drill for foot troops including squad, platoon, and company drill. A minimum of six hours of Marine Corps physical training methods and techniques, including administration of the Marine Corps recruit physical fitness tests, is an integral portion of the program. Characteristics of military commands and orders; development of the command voice; ceremonies, reviews, parades, escorts, and inspections; and interior guard duty are emphasized in instruction.

### 22.04 01 08 00 Weapons

Instruction in weapons which emphasizes familiarization with the U.S. Rifle Caliber .30 M1, and a detailed study of the U.S. Rifle, 7.62mm M-14, and includes description, characteristics, disassembly and

assembly, functioning, operations, stoppages and immediate action; spare parts, accessories, ammunition, care and cleaning; and familiarization with the bayonet, the hand grenade, and the M79 grenade launcher.

#### 22.04 01 09 00 Marksmanship

Study and practice of the principles of marksmanship. Included are demonstrations and student participation in sighting and aiming positions, trigger squeeze, sling adjustment, range procedures, and emphasis on safety precautions; range practice with the caliber .22 rifle; and matches and competition with the caliber .22 rifle as practicable.

#### 22.04 01 99 00 Other Military Training I

Include here other organized subject matter and experiences emphasized in Military Training I which are not listed above. (Specify.)

#### 22.04 02 00 00 Military Training II

An extension of Military Training I, including classroom instruction and application in and out of school emphasizing aspects of basic military training such as Leadership, Drill and Exercise of Command; Small Unit Infantry Tactics; Map Reading and Use of the Compass; and Individual Training for Atomic Warfare.

#### 22.04 02 01 00 Military Organization

A review of previous instruction in military organization. Extended emphasis is on organization of the rifle platoon of the rifle company, a brief resume of the position of the rifle company in the infantry battalion, and the position of the battalion in the infantry regiment. Attention is given to the position of the Marine Corps in the national defense structure.

#### 22.04 02 02 00 Leadership, Drill, and Exercise of Command

An extension of previous instruction in leadership, drill, and exercise of command. Morale, essentiality of leadership, command presence, understanding people, and drill of the Marine with and without arms are emphasized. Also included are squad and platoon drill, parades, reviews, inspections, ceremonies, interior guard duty, and Marine Corps methods of physical training.

#### 22.04 02 03 00 Weapons

A review of the M-1 rifle and M-14 rifle with an extended study of weapons, including the U.S. Pistol Caliber .45 M1911A1: Its characteristics, general data, disassembly and assembly, safe-handling pro-

cedures, and functioning. Also provided is familiarization with the M-72 Light Antitank Weapon.

#### 22.04 02 04 00 Marksmanship

A review of material and experiences in marksmanship presented during previous year. Demonstration and student participation in sustained fire exercises; effect of wind; scorebook; sight setting and target dimensions; and matches and competitions with caliber .22 rifle as practicable, are emphasized.

#### 22.04 02 05 00 Small Unit Infantry Tactics

Subject matter and experiences concerned with organization of the Marine rifle squad, emphasizing duties of each squad member and the organization patrols. Included are arm and hand signals; individual protection of the Marine; elementary camouflage; duties of scouts and leaders, scouting by day and night, information, and observing and reporting; form of reports; prisoners, principles of security, and outguards and outposts; tactics of the squad on attack/defense; security missions, including troop-leading procedure, orders, and defense of obstacles; and technique of fire of the individual and the squad.

#### 22.04 02 06 00 Map Reading and Use of the Compass

Subject matter and experiences which provide an introduction to map reading and uses of the compass. Marginal information, conventional signs, military symbols, measuring map distances, grid coordinates, elevation, locating and direction, determining direction with and without compass, orientation of maps, and preparation of overlays are included.

#### 22.04 02 07 00 Individual Training for Atomic Warfare

Subject matter which is concerned with the general characteristics of atomic warfare and individual protective measures and techniques. Emphasized in instruction are the effects and damages that atomic weapons produce; limitations and capabilities of atomic weapons; and individual actions required when atomic weapons are utilized.

#### 22.04 02 99 00 Other Military Training II

Include here other organized subject matter and experiences emphasized in Military Training II which are not listed above. (Specify.)

#### 22.04 03 00 00 Military Training III

An extension of Military Training I and II,

## 22 JUNIOR ROTC--(Continued)

including classroom instruction and application in and out of school emphasizing aspects of basic military training such as History and Traditions of the Marine Corps; Leadership, Drill, and Exercise of Command; Weapons; Marksmanship; Maps and Aerial Photographs; Small Unit Tactics; Infantry; Military Teaching Methods; New Developments; Organization of the Marine Corps; and Military Service: Opportunities, Obligations, and Benefits.

### 22.04 03 01 00 History and Traditions of the Marine Corps

Subject matter comprised of a short resume of Marine Corps history and expansion of Marine Corps campaigns and battles during World War II, Korea, and Vietnam. Biographical sketches of prominent Marine leaders, past and present; specific examples of personal heroism and unit gallantry in the Marine Corps; hardships endured and sacrifices made by the Marine Corps for the Nation; famous mottoes, slogans, and colorful traditions of the Marine Corps; contributions of the Marine Corps to the Nation throughout history in defense of the country; and the role of the Marine in a democracy are emphasized. Also included in instruction is a review of the Code of Conduct for members of the Armed Forces of the United States.

### 22.04 03 02 00 Leadership, Drill, and Exercise of Command

An extension of previous instruction in leadership, drill, and exercise of command. Psychological factors of leadership, actions of a leader, self-analysis, and attitudes of officers and noncommissioned officers; preparation for command, communication of orders, and methods of giving commands; platoon and company drill, parades, reviews; and inspections and ceremonies are emphasized.

### 22.04 03 03 00 Weapons

A review of weapons studied during the first and second years with emphasis on the M-14 rifle. Instruction provides for a brief familiarization with the machine gun 7.62 mm M-60, the 60mm and 81mm mortars, and the 106mm recoilless rifle, including characteristics, capabilities, and types of ammunition.

### 22.04 03 04 00 Marksmanship

A review of the rifle marksmanship. Additional training includes sighting and aiming; positions, trigger squeeze, sustained fire, windage, scorebook, and

sight, setting; stimulation of interest in marksmanship through range practice; and matches and competitions utilizing small-bore facilities as available.

### 22.04 03 05 00 Maps and Aerial Photographs

Subject matter designed to provide a thorough review of previous instruction in map skills. A brief introduction to aerial photographs and photomaps, including the types used by the Marine Corps, identification, orientation, and uses are emphasized.

### 22.04 03 06 00 Small Unit Tactics: Infantry

Subject matter designed to provide a brief review of previous instruction in small unit tactics. Combat formations of the rifle platoon, including arm and hand signals; duties of the platoon leader; the rifle platoon, reinforced with elements of the weapons platoon in the attack, defense, and withdrawal—including the use of firepower, reconnaissance, security measures, and combat intelligence; the use of cover, concealment, and observation; and battlefield firing positions are all emphasized.

### 22.04 03 07 00 Military Teaching Methods

Subject matter comprising an introduction to military teaching methods. Included are selected aspects of instructional techniques and used in planning and presenting instruction; speech techniques for the instructor; the construction and use of lesson plans and training aids; and familiarization of cadets with methods of military instruction to enable them to conduct elementary instruction in basic military subjects.

### 22.04 03 08 00 New Developments

Subject matter concerned with current unclassified developments in organizations, tactics, weapons, techniques, and material of the Marine Corps. Methods used to develop new equipment are also included.

### 22.04 03 09 00 Organization of the Marine Corps

A study of the mission and role of the Marine Corps. The supply, service, and maintenance contributions of the technical and administrative services, including close combat support, are emphasized.

### 22.04 03 10 00 Military Service: Opportunities, Obligations, and Benefits

Subject matter which emphasizes opportunities for both officer and enlisted careers in the Marine Corps. The Selective Service Act of 1948, the Universal

Military Training and Service Act, and the Marine Corps Reserve are studied. Information on the United States Naval Academy (USNA), including opportunity for appointment, history, and traditions of the USNA Corps Midshipmen; information concerning the NROTC (Marine Option) program and the Naval Enlisted Scientific Education Program (NESEP); and general information on the Marine Corps Officer Candidate and Platoon Leaders Course Programs, and the Warrant Officer and LDO Programs, are emphasized.

22.04 03 99 00 Other Military Training III

Include here other organized subject matter and experiences emphasized in Military Training III which are not listed above. (Specify.)

22.04 99 00 00 Other Marine Corps Junior ROTC

Include here other subject matter and experiences emphasized in the Marine Corps Junior ROTC which are not listed or classifiable in one of the above categories. (Specify.)