



## 1. Twelve key ideas

Here are 12 key ideas.

1. Communication is a system; it is not something you do as the sender; it is something you, the sender, and the audience do together. This specifies the WHO. You don't just send off an e-mail.
2. WHAT and WHY. There is a message and a purpose. The message and the purpose are to satisfy or answer the need(s) of the audience. The audience may be people from more than one level of concerns: your supervisor, with cc copies to colleagues, the granting agency and the press.
3. WHAT. If the audience fails to get the message, it's the fault of the sender. Statements like "Hey, I can't help it if they didn't understand me!" are wrong!
4. HOW The medium includes words, symbols, numerals, body language, a handshake, facial expressions, shifting of the eyes, the quality of the paper, the binding, the overall appearance of the written material. Technical communication may also include equations, data, tables, figures, graphs and its own standards, rules and expectations..
5. HOW. The medium often includes words. Words only have meaning in people. What means one thing to you may mean something completely different – and embarrassing– to the audience.
6. We think in terms of our past experience.
7. WHEN. The occasion specifies when and where in the context of other events. For example, contrast speaking to the Rotary club just after a holiday weekend with a speech to the same Rotary club at their 25<sup>th</sup> anniversary. Another example is that a written report might be submitted just before your supervisor is flying to Istanbul or just before she goes on holidays.
8. Engineers apply our problem solving skills to create effective communications.
9. Communication is usually a multistage process. For example, writing reports and giving a "speech" are usually a four-stage process: 1. prewriting, 2. writing, 3. revising and polishing and 4. producing and presenting. Listening and responding is a four stage process: 1. sensing, 2. interpreting, 3. evaluating and 4. responding.
10. We take in new information into Short Term Memory, where it is rehearsed before it is transferred into Long Term Memory. STM is limited to  $7 \pm 2$  chunks. If new information is delivered too rapidly or with out appropriate summaries, the chunks are lost.
11. Survey of 100 engineers suggests that audience analysis is the most challenging task.
12. The five criteria for the final product include:
  - Audience:** it answers the audience's questions and concerns,
  - Content:** it provides sufficient evidence to support and justify your answer,
  - Organization:** the sequence and organization meets the audience's needs,
  - Style:** expressed in unambiguous, clear and interesting style as judged by the audience,
  - Form:** grammar, word usage, format and behaviour are correct by standards expected by the audience.

Assessment of the quality of the product of communication

	Oral	Written	Rate
Audience	+ Has content, organization, style that meets my needs, answers my questions & concerns, understandable, speaks at my level, seems interested in me. Consistency in choice of audience. Prioritizes and handles multiple audiences well	+ Has content, organization, style that meets my needs, answers my questions & concerns, understandable, writes at a level that I can understand. Consistent in choice of audience. Prioritizes and handles multiple audiences well	/20
	- Talks above me, talks down to me, uses jargon word I don't understand, doesn't answer my needs or questions, tells it from his/her viewpoint. Difficult to identify the audience. Writer based or history based	- Everything you didn't need to know, a dump of all the sender knew. Fails audience in organization, content and style. simple things are explained yet complex ideas are not, Difficult to identify the audience; jumps around	
Content	+ Provides sufficient evidence to support and justify the conclusion; provides supporting evidence; issues are addressed, counterarguments given, includes appropriate visuals, diagrams and/or equations		/20
	- Tries to claim a conclusion without evidence; makes claims that are not substantiated		
Organization	+ Clearly differentiates between a communication to <i>inform</i> vs one to <i>persuade</i> . Correct coordination and subordination, provides advanced organizers, good transitions between sections, includes a summary/conclusion		/20
	- Rambles, jumps around; faulty subordination or coordination, lacks transitions, advanced organizers and summary/conclusion. Unclear as to whether the communication is to inform or persuade. Chronological.		
Style	+ Interesting, variety of and clear visuals; eye contact, gestures. Voice is clear, variety, quality and diction, Difficult ideas are restated by paraphrasing	+ Interesting, coherent with deletion of ambiguous and extraneous visuals and words; equations and terms defined; good diagrams	/20
	- No eye contact, crazy gestures, incoherent sentences, poor enunciation, Umms and Ahhhs, mumbles, annoying mannerisms	- Vague, wordy, boring words, no variety in sentence structure. long involved sentences. Uses jargon and code words	
Mechanics/ form	+ Begin and end on time, correct use of language, believable looking, visuals handled correctly, grammar correct	+ Correct format and referencing, no plagiarism; grammar, spelling punctuation correct; correct length; care in preparation is evident. Referencing correct format	/20
	- Runs overtime; incorrect language, grammar; visuals out of sequence, upside down, lights switched off at the wrong time	- Did not follow the conventions for this discipline or situation; sloppy. Antecedent problems with pronouns.	

Strengths

Areas to work on

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Name: Mary Jane XXXXXXXXX

Address: 697 Sheboygan St., Madison, WI, 1002546

Telephone: 716 539-2477

e-mail: [majne@gmail.com](mailto:majne@gmail.com)

Year of birth 1990

**Education:** ChE, University of Wisconsin, Madison. Graduate 2011. Electives in Business management 101, Statistics, 301. Have received scholarships.

High school, Greenbay.

**Employment:**

Summer 2010

Harry's Deli Restaurant, 308 Mill St., Greenbay, Mr. Cceil Zonpton, 416-666-2138. head waitress.

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Summer 2009.

Bramalea Sod, RR#2, Bramalea. Mr. Harry Twiss. 519 647-2155. Typical farm work because I couldn't get employment in ChE.

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Part time: Fall winter 2009.

Clappison's Veterinary Services, Hwy #6, Greenbay, Dr. J. McNally, 416 689 8005. Fed animals in the evening and on weekends.

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Summer 2007; part time Sept 2007 to June 2008 and full time Summer 2008.

Circle Q Ranch, Greenbay, Colin Graham, 905 689 4521. Manager for horses.

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**Licences:** Driver's licence

**Spare time:** most sports. church and music, facebook, youtube with social network of 213.

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**References:** available on request; go to Facebook at URL [www.facebook.com](http://www.facebook.com)

## Writing process: Attitudes and Audience analysis are major challenges

### Attitudes

<b>Overall</b> (Linda Flower research)	
<i>Unsuccessful</i>	<i>Successful</i>
writer based, content: dump all I know, length proportional to time spent; organization: chrono, history, style, jargon antecedent problems for pronouns	content, organization and style determined by audience
<b>Prewrite</b>	
overwhelmed, information overload	carefully selects information based on audience
spent 90% time writing with little time prewrite	spends most time prewrite and revising
neglects audience analysis	extensive time on audience analysis
one magic format and plan	plan fits audience need
keep plan in head or use very brief outline	lot of time developing plan
<b>Write</b>	
I'm not an English major; either I have it or I don't	problem solving approach
should never be confused	confusion helps; if I'm confused then so will the audience
fuss over every detail as write; each sentence must be perfect	Let ideas flow. Over editing kills the flow
<b>Revise</b>	
only need a single draft	many drafts, willing to completely rework
revise = polish grammar & style; sentence level focus	macro structure focus, organization, content
unwilling to discard; I spent time doing this; it should fit in somewhere	willing to discard if does not match audience's need
<b>Deliver</b>	
let stress overcome speaking abilities	manage stress; practise, practise, practise and anticipate unexpected difficulties
unaware of the ethos or credibility influence	credibility is key

Audience analysis:

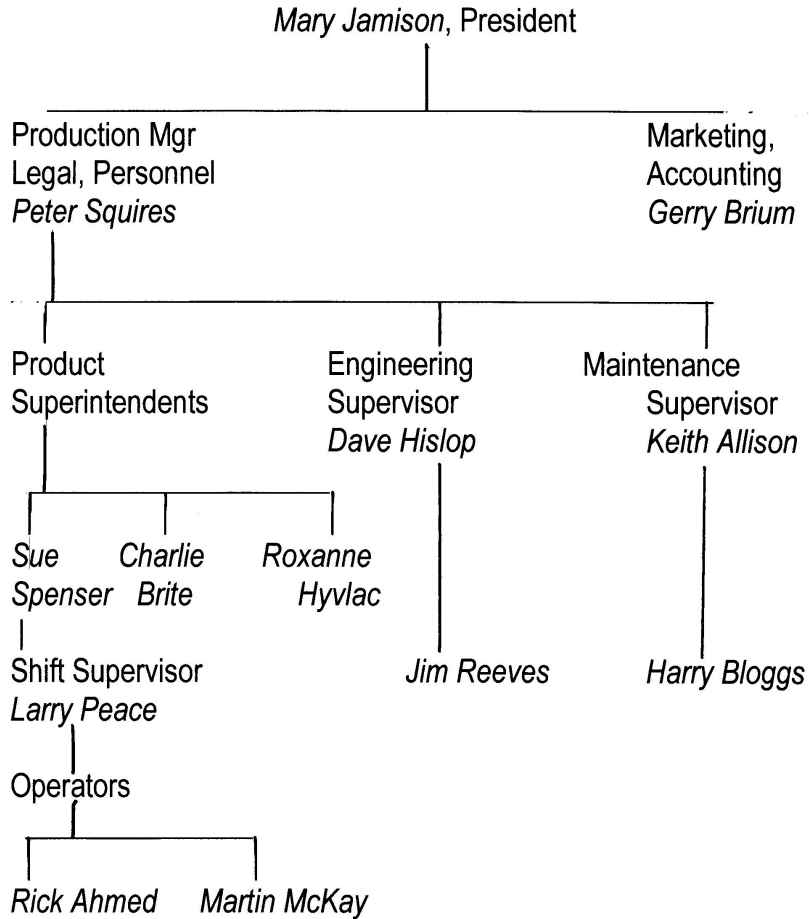
1. Characteristics-concerns-needs,
2. the Audience Checklist,
3. the Persistent Why,
4. Seven Stakeholders,
5. Generations
6. Cultural dimension.

1. Characteristics-concerns-needs (Engineering business context)

	<b>Operator</b>	<b>Engr</b>	<b>Head Engr</b>	<b>Tech Div</b>	<b>President</b>	
	<b>Rick</b>	<b>Larry/Jim</b>	<b>Sue Dave Keith</b>	<b>Peter Gerry</b>	<b>Mary</b>	
<b>● Time horizon</b>	<b>1 wk</b>	<b>3 mos</b>	<b>1 a</b>	<b>2 a</b>	<b>5a</b>	<b>10a</b>
<b>● Perspective</b>	<b>local turf</b>		<b>section</b>	<b>division</b>	<b>company</b>	<b>globe</b>
<b>● Monitors</b>	<b>work</b>	<b>projects</b>	<b>projects/ people</b>	<b>people/ money</b>	<b>money/ direction</b>	
<b>● Works with</b>	<b>hands/ doing</b>	<b>mind</b> <span style="float: right;">-----&gt;</span>		<b>deciding</b> <span style="float: right;">-----&gt;</span>		
	<b>calculating</b> <span style="float: right;">-----&gt;</span>					

**Example responsibilities**  
**Quality, quantity, cost control,**  
**Personnel (selection hiring, training, motivation, performance, termination)**  
**Cost improvement**  
**Safety**  
**Facilities, equipment, supplies**  
**Intergroup coordination**  
**Rules, policies, procedures**  
**Representing management to workers and vice versa**





A. To: \_\_\_\_\_ Date: \_\_\_\_\_  
 From: \_\_\_\_\_  
 Re: This Month's Activities

This month production has produced the sales quota on time and within budget on most product lines. This is summarized below:

Product name:	Sales Quota	Produced	Percentage
Quibbles	\$350 000	\$350 000	100
Dribbles	\$286 000	\$285 000	99.6
Sniffles	\$150 000	\$150 000	100

The shift operator's schedules for production lines A and C were readjusted because of illness; minor maintenance had to be done on three lines: A, C and D.

Enclosed are the production schedules for the next month.

As you requested I enclose the production budget proposals for the next half year, and the capital requests for Engineering projects to reduce costs for the next year.



**B.** To: \_\_\_\_\_ Date: \_\_\_\_\_  
 From: \_\_\_\_\_  
**Re: Production**

This month's production was on schedule. We had trouble with the lubrication system on Line A. The line was shut down from 8 am to 10:30 am while maintenance identified and corrected the fault. However, the loss of production because of this shutdown was made up for on the midnight shift.

I have instituted a checking program for all of the lubrication systems in our division to ensure that this does not occur again.

**C.** To: \_\_\_\_\_ Date: \_\_\_\_\_  
 From: \_\_\_\_\_

**Re: Operations for this next week**

Because Phil was away sick this past week, I have rearranged the work schedules for the next week as follows:

	morning shift	afternoon	midnight
Chief Operator	CEQ	RBM	STR
Leading Hand	KLF	TRN	EWM
Yard Man	ITS	GHV	RJ

I trust that this is satisfactory.  
 Keep up the good work. Our production last week was "on target" despite the setbacks and the maintenance required on the "A" line.

**D.** To: \_\_\_\_\_ Date: \_\_\_\_\_  
 From: \_\_\_\_\_

**Re: Lubrication system on Line A.**

In response to a call from Rick, the chief operator on morning shift, I inspected the lubrication system on line A. The float, model #56802, had a leak that was extremely hard to locate. The hole allowed oil to seep into the float. The float lost its buoyancy. I checked with Bill at stores. A replacement float with this model number was not in stock. He could order one; delivery would be one week.

Since I received a lot of pressure from Rick to keep the Line on production, I drilled a hole in the faulty float, drained out the oil and then sealed a plastic bag over the float. This gave the

<b>E.</b>	Date:
To: _____	
From: _____	
Re: Operation of Line A	
<p>At 8:00 am the line A, which produces 1/3 of this company's quota of Quibbles, was shut down because of a leaky float in the lubricating oil system. This float, model #56802, was repaired temporarily by Harry Bloggs, maintenance. Harry did a good job under trying conditions. The line was up and running again by 10:30 am.</p>	
<p>Our new market strategy for the sale of Quibbles seems to be succeeding. Marketing suggests that next month's target of Quibbles should be increased by 15%. Congratulations.</p>	

<b>F.</b>	Date:
Mr Harry Bloggs, Maintenance.	
Dear Harry,	
<p>On behalf of the company, thank you very much for your skill at keeping line A in production this past month. As you may be aware, we have worked very hard to attract new orders. It was crucial that we fill our orders this month, especially on the Brand "Quibbles".</p>	
<p>Because of the speed with which you completed the repair, we were able to meet our production quota. Keep up the good work.</p>	
	Sincerely,
cc. _____	_____

Seven stakeholders

Family friends, fellow travellers, fence sitters, foes, fools, fanatics

Probable Root Causes of Resistance

Possible Root Cause	So What might you do?
<ol style="list-style-type: none"> <li>1. Fear of change, new expectations. Halfman et al (1972) say a clear majority in most institutions is against <b>any</b> new idea.</li> <li>2. Apathy: Comfortable with current routine, proud of current situation.</li> <li>3. Personal disparagement: we mistakenly suggest that what others have been doing is wrong, insufficient, a "failure".</li> <li>4. Vested interests of others: Loss of power, authority, resources that currently have. For example, the "threatened-department effect": whenever cooperation from another group is required, usually they will resist giving up some of their "authority".</li> <li>5. Not-invented-here: Initiation for change and new ideas must come from <b>outside</b>. "How could you possibly think up a new idea." Colleagues are too familiar with us and are unwilling to credit the new idea.</li> <li>6. Hostility, rejection: the tactics and style of the "champion" are obnoxious; poor communication.</li> <li>7. Negativism: Someone has to question: some influential members feel obliged to have doubts for the rest of the people.</li> <li>8. Overwhelmed by the enormity of the proposal.</li> <li>9. Indecisiveness</li> <li>10. Prejudice: the no. 3 obstacle for inventors (Rossman,1964)</li> </ol>	<p>Become familiar with attitudes and characteristics of change. Address that</p>

**Misconceptions about Convincing Fence-sitters, foes, fools and fanatics:**

Some of the misconceptions about convincing others are:

1. the logic will win; "... ideas are almost never accepted on their merits." (Miles, 1964).
2. dealing primarily with ideas and things, no, dealing with people and their motivations and personalities. (Bailey, 1978). The strongest appeal is the ethos or credibility appeal.
3. resist change because *'we've done it before*, etc but real reason is prefer status quo

## Generations for Audience analysis:

Name

Prefer

Communication ideas

1926-1945 Traditionalists	status quo	facts, clear and straightforward
1946-1964 Baby boomers	competition, team, own experience	body language, emotion, stories & narratives.
1965-1981, Gen X, Me gen	what's in it for me?	short attention span, informal style, rich visuals, headlines,
1982-2000 Gen Y, Millennium	peer group, multitask	short attention span, action words, visuals, humour



World's water supply

Audience: general public as PR for our company

Purpose: to show our company is knowledgeable

1. Introduction

2. World's supply and problems of supply

3. United States's Water Resources

3.1 Population and area

3.2 Precipitation and Runoff

3.3 Lakes

3.4 Summary of US Water Resources

4. United State's Water Requirements

4.1 Some Uses of Water

4.1-1 Power

4.1-2 Industries and Agriculture

4.1-3 Transportation

4.2 Future Requirements

4.3 Comparison of Resources and Requirements

5. Location of Supply in Relation to Demand

5.1 Present Conditions

5.2 Future Conditions

6. Preparing for the Future

6.1 Water Supply and Use in the United States

6.2 Pollution, Seasonal Flow and Location

6.3 Summary

References

### Plan your resume

**Audience:** recruiter, handles 200 applications/day; all are ChE, looking for leadership, initiative, good interpersonal skills, strong problem solving, good communication and a match with corporate culture.

### Contact info

### Skills

skill 1 and how you know you have it

### Education

include electives, club activities

### Work

Title, job description, company name, supervisor  
quantitative details of what you did and learned  
skills acquired and evidence.

### Certificates and other

driving, languages, awards, computer & internet

### Spare time

Sports, Hobbies, volunteer, organizations

### References

Be quantitative

		Feedback
Audience	Recruiters, engineers. Needs: leadership, technical skill, influence/persuade; detail & followthrough, communication, (innovation, people skills, instruction, research)	
Content	Evidence of self-awareness, Personal details, work experience, education experience, spare time career objectives, availability for work. Evidence	
Organization	Organized by topic; advanced organizers & summary are usually not needed Titles of sections are important	
Style	Sentence style - not point form. Quantitative - not vague generalities Concise and coherent. Think about the "Action Words and Phrases" from Bezanon (1985)	
Form/ Mechanics:	Not more than two pages or on a UCPA form.	



Name: Mary Jane XXXXXX

Address: 697 Queen St, Brampton

Telephone: 534-9999 Date of Birth: Mar 21, 1967

Social Insurance Number: 499 222 333

What I Can Offer: This job: I am good at working with people and working on my own with minimum or no supervision. These skills I developed from my waitressing and bartending at Harry's Deli Restaurant, work at the sod farm, at the florist, at the riding stable and through my numerous committees and sports programs. I am well organized, get jobs done on time, am reliable and show initiative. From my sports, my school and church groups, I have developed my leadership, can talk to others and express my views and can work with other people. I have managed money as waitress and bartender, as treasurer for the tennis club, and as part of my work at the florist, the Circle Q Ranch and my paper route. I learn new skills quickly as shown especially from my work at Harry's Deli's restaurant and on the Circle Q Ranch where I learned how to deal with the customers firmly but pleasantly. I was promoted to manager within about a year and trained six new employees.

Education: I will have completed my second year at McMaster University in Civil Engineering and Management in April 1988. I received Entrance Scholarships from McMaster University and from Ontario Government. I plan to continue at McMaster University with specialty in environmental issues. My average has been about 80%.

#### Employment:

Full-time: April 1987 to Sept 1987

Harry's Deli Restaurant, 308 Mill St, Brampton, ON, Mr. Cecil Zompto, 416-555-6666.

Position: Hostess and busgirl/ promoted to waitress, cocktail waitress and bartender and then promoted to one of the head waitresses. Setup for banquets. Trained three waitstaff.

Full-time: June 1986 to Sept 1986

Bramalea Sod, RR # 2, Bramalea. Mr. Harry Twiss, telephone 519-647-2137.

Position: cared for a herd of 100 dairy cows including milking 32, and feeding calves. I also did other farm work (haying, painting and field work) with little to no supervision. I was commended for being a hard worker, for learning quickly and doing the tasks efficiently and with no supervision.

Part-time: Sept 1985 to June 1986.

Clappison's Veterinary Services, Hwy # 6, Watertown, ON  
John McNally, telephone 416-689-8005

Position: Acted as receptionist during evening hours, keeping track of appointments, handling emergencies, booking appointments and handling the payment of accounts. Assisted the vet with treatments, helped in surgeries, cleaned clinic, and cleaned, fed and medicated animals. I was commended for how quickly I learned how to do the responsibilities.

Full time: June 1984 to Sept 1984; part time Sept 1984 to June 1985 and full time June 1985 to Sept 1985.

Circle Q Ranch, Carlisle, ON. Colin Graham, telephone: 689 4521.

Position: selected horses for customers; took groups of riders (1 to 20 horses) out on the trails on the 100 acre ranch; kept accurate records of which horses went out and when; collected the money (up to \$1000 per day); groomed, fed, saddled, cleaned out, and checked the health of the 75 horses on the ranch (sometimes I worked alone and sometimes there were 2 or 3 other teenage helpers); advised and trained six new employees. I received a raise and was commended for getting the jobs done in a minimum amount of time and for being a hard worker. I sometimes had to cope with uncooperative riders firmly-but nicely. In July 1985, I was promoted to manager.

1977 to 1984

Delivered the Hamilton Spectator newspaper to 35 customers; managed about \$50 per week. I won about 5 contests for getting new customers and was commended for good, prompt service in all kinds of weather.

Summers of 1982, 83 and part of 84.

Babysat two girls during the day for 4 days a week; prepared the meals, cleaned the house. I was commended for being so good with the children and for keeping the house so clean.  
reference: Mrs. D. Bulmer, Watertown, telephone: 689 5243.

Licenses: Driver's licence.

Certificates: Guelph Entrance Scholarship, Ontario Scholar, High school Trauma team; Swimming Bronze Medallion, Leader's and Instructor's; Royal Conservatory of Music Grade 9 piano, Grade 2 Rudiments and Theory. Terry Fox Centre.

Spare Time: I enjoy sports. I play volleyball, waterpolo and squash and am taking diving lessons. In high school I was on every team: basketball, volleyball, badminton, gymnastics, track & field, tennis and soccer. I was captain of the junior basketball team. I enjoy swimming, waterskiing, baseball, biking, and alpine skiing.

I was on the Freshman Orientation team for new students and organized an intermural sports team. At high school, I served on many committees: Grade 12 Rep. on the Senate; social committee; trauma team; year book and was president of the prom committee.

At St James United church, Watertown, for 3 years I was treasurer for the Sunday School, and I was president of the youth group of about 15 young people. We met once a week and had a wide variety of speakers, campouts, and special events.

I make many of my own clothes; have knitted about 30 sweaters. My specialty is track suits and I have made about a dozen as gifts.

I made a large sized muppet. I have developed an act with the muppet and was invited to be the entertainment at 4 children's birthday parties, and numerous church activities. I enjoy playing the piano, the flute and the drums. I have played for sing songs and at concerts.

4813 Possible answer.  
~~2-36~~

Example: a report on the World's Water Supply

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? US or  
Canada

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Why include as separate major topic? include in #1?

subordinate

include under distribution.

Use parallel construction for sections 3 and 4

