

## **A Proposed Model of E-Learning For Merging with Sudanese Universities Teaching Programmes in Khartoum State**

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**Abstract:** *This study aims to detect the proposed model of integrating the E-Learning so as to be adopted as a teaching tool in university teaching, and to detect the knowledge of curriculum and standards, and how to write electronic tests by using computer systems; and by defining the appropriate infrastructure to activate electronic learning through answering 43 expressions accompanied by various measuring instruments. The study covered 200 teaching staff members well experienced in teaching, in five Sudanese universities of different colleges, namely University of Khartoum, Sudan University of Sciences and Technology, University of Elneelain, University of Elrebat Elwatani and University of Sciences and Technology. The researcher used the Descriptive analytical methods and the programme of Statistical packages of Social Sciences, SPSS for data analysis and processing; as well as using Excel programme to display graphics. The researcher concluded that the proposed model for approving the integrated E-Learning necessities a specialised database of E-Learning, through which the curriculum is reviewed continuously. The Electronic library will support all disciplines and provide a comprehensive plan for the employment of communication technology in Education. In order to optimise the efficiency of E-Learning, the following criteria must be met: Determining the objectives of the curriculum and defining its vocabulary. And that the contents of the E-Learning course contents conform to the approved International SCORM. The Electronic subject matter should be subjected to arbitration, predetermining the behavioral objectives of the material. The Electronic lectures shall include everything taught in the lecture in its traditional form. The construction of quarterly test and working papers and home works are set electronically by using objective questions or by pairing them with the essay questions, so as to suit the behavioral objectives of the course. The staff members should prepare a bank of electronic test questions and home works. Provisioning of feedback to students about their test and home works performance.*

**Keywords :** *Electronic syllabus, Electronic tests, Infrastructure.*

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Date of Submission: 17-11-2018

Date of acceptance: 01-12-2018

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### **I. Introduction**

The university and higher education have become of great importance to mankind socially, economically and politically, as it is considered one of the prominent distinctive measures of communities progress. The relation between university education and development is also considered as of great importance to the interest of the developing and progressing countries, as universities are an important source of providing qualified human resources in the labour market and progressing the social and economical development process. Likewise, at present, university and higher education are the most prominent manifestations of progress in the community, where it is certainly realised that to satisfy the desire of any community to be developed, depends on the resultant efforts exerted in human resources development<sup>(1)</sup>; the degree of higher education importance and its challenges and variables facing it, most notably, the students flow and high cost and the rigidly of the educational system and lack of human resources and technology; changes in the nature of occupations in the labour market that depends on modern technology; the breadth of bureaucracy and keenness of the masses to have their human rights including education. in general, and university education, in particular<sup>(2)</sup>. Telecommunications have been reflected on the education system, and they essentially necessitate methods, strategies, techniques and modern models to face many challenges which hinder the educational process, and to help improving it, and to access the best teaching methods<sup>(3)</sup>. This had resulted in the E-learning Teaching, which is defined as a teaching method by using modern communication mechanisms, that include computers networks and multimedia including sound, image, graphs, research mechanisms, electronic libraries; web portals, on- line or in classroom, in the shortest time, least effort and greatest benefit<sup>(4)</sup>; to identity the impact of using information technology and telecommunications in university teaching system, for submitting proposals

and recommendations to resolve its problems and develop it. Some of the relevant topics discussed were:- "Style of Default Education" by UNESCO in Paris ,in1998, titled: "University Teaching in the 21st Century, From Traditional Education to Default Education"; The11th Annual(3rdArabic) Conference held by the Centre of Development of University Education, 2004, titled: "Prospects of Reform and Development of Arabic University Education"; The Fourteenth Annual National Conference (sixth Arabic), by the Centre of University Education Development, 2007, titled: "New Prospects in Arabic University Education" and the eleventh Scientific Conference of the Egyptian Committee of Education Techniques 2008, titled:"Electronic Education Techniques and Educational Development Challenges in the Arabic world". Likewise, all concerned all over the globe have been urged and pursued to perform thesis and researches in this field.

**Research Problem:**

1. Endeavors to identify the infrastructure that suits activation of the E-Learning.
2. Identification of electronic curriculum criteria.
3. 3. Proposing a suitable model for merging E-Learning and approving it as a university teaching tool.
4. Identification of examinations systems mechanism and students evaluation in the E-Learning.

**Research Questions:**

1. What is the suitable infrastructure for E-Learning teaching?
2. What are the Electronic curriculum criteria?
3. What is the proposed system model to merge electronic education for teaching and approval, as a university teaching tool?
4. What are the examinations systems and students evaluation in the E-Learning?

**Research Objectives:**

1. Discovery of the infrastructure that suits the E-Learning.
2. Identification of the Electronic curriculum criteria.
3. Discovery of the proposed system model to merge the E-Learning with the University teaching programmes.
4. Identification of examinations systems and students evaluation in the E-Learning.

**Research Limits:**

These are objective limits, time limits and spatial limits:

1. Objective Limits: were confined to identify the proposed model to merge the electronic education with university teaching and to identify the suitable infrastructure for E-learning, and the criteria for electronic curriculum, as well as electronic examinations methodology and students evaluation mechanism.
2. Time Limits: this research was done during the period from July, 2016 to July, 2018.
3. Spatial Limits: this research was done with teaching staff members of five Sudanese universities, of various colleges , in Khartoum State.

**Curriculum and Research Procedures:**

**1. Research Curriculum:**

The Descriptive Analytical Curriculum was used to describe and analyse the data, by using the Statistical Packages of Social Sciences, SPSS; and by Excel programme to clarify the charts.

**2. Research Community:**

This consisted of teaching staff members of five Sudanese universities in Khartoum State.

**3. The Sample:**

A random sample of 200 staff members, of various academic grade scales, and education expertise, in five Sudanese universities of various colleges in Khartoum State, were selected.

**4. Research Tools:**

The research data was obtained from the teaching staff members through their questionnaire feedbacks, mainly.

## II. Results & Discussion

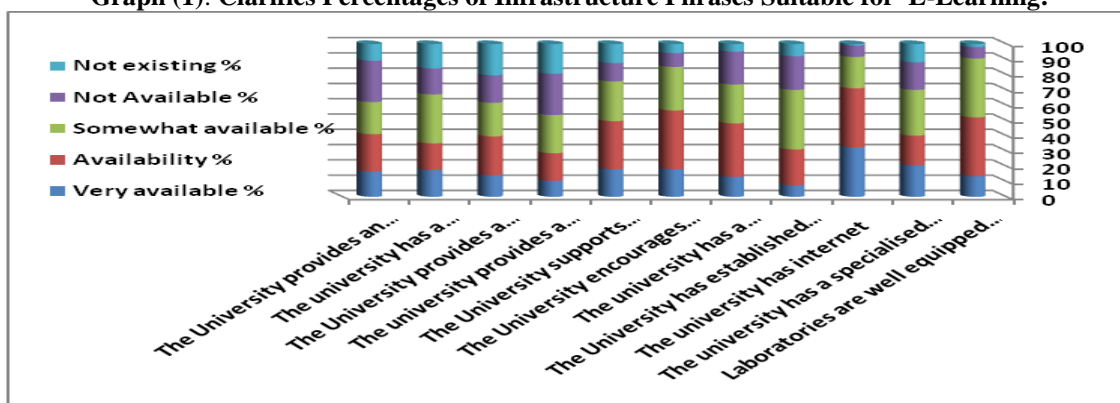
### 1. Infrastructure that Suits the E-Learning.

**Table (1): Clarifies Frequencies and Percentages of Infrastructure Phrases Suitable for E-Learning:**

NO	Phrase	Very available		Availability		Some what available		Not Available		Not existing	
		Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
1	Laboratories are well equipped with modern tools.	27	13.5	77	38.5	77	38.5	15	7.5	4	2
2	The University has a specialised database of electronic teaching.	41	20.5	39	19.5	60	30	36	18	24	12
3	The University has internet	65	32.5	77	38.5	41	20.5	15	7.5	2	1
4	The University has established an integrated portal to provide educational services.	15	7.5	47	23.5	78	39	44	22	16	8
5	The university has a comprehensive plan for using Telecom Techniques for education	26	13	70	35	51	25.5	43	21.5	10	5
6	The University encourages faculty members to use E-Learning methods.	36	18	77	38.5	57	28.5	18	9	12	6
7	The University supports research on E-Learning.	36	18	63	31.5	52	26	24	12	25	12.5
8	The University provides a guidelines manual of electronic curriculum.	21	10.5	36	18	50	25	54	27	39	19.5
9	The University provides a special electronic file for each faculty member.	28	14	51	25.5	44	22	36	18	41	20.5
10	The University has a comprehensive electronic library integrated for all specialties.	35	17.5	35	17.5	64	32	34	17	32	16
11	The University provides an electronic curriculum that is continuously.	33	16.5	49	24.5	42	21	54	27	22	11
Total percentages		16.50%		28.23%		28%		16.95%		10.32%	

Reference: Prepared by the researcher using SPSS

**Graph (1): Clarifies Percentages of Infrastructure Phrases Suitable for E-Learning:**



Source: Prepared by researcher using Excel Programme.

As shown in the table (1); Graph (1), clarify the opinions feedback frequencies and percentages stated by the respondents regarding the suitable infrastructure for E-Learning. The findings show that an average of 60% of the respondents confirmed that the Universities laboratories are well equipped with new devices, internet, teaching staff encouragement to use E-Learning programmes. 29% of the respondents confirmed equipped laboratories availability to some extent, while 30% of respondents showed non availability of specialised databases in E-Learning and no complete websites for educational services. Approximately there was equity between respondents in their opposing opinions in availability and somewhat availability. 50% of the respondents showed university confirmation of financial support to researcher in E-Learning programmes, while 26 % of the respondents showed somewhat financial support. 57% of the respondents showed university

encouragement to the teaching staff members to use E-Learning teaching methods, but there was no comprehensive plan to use Telecom techniques in E-Learning; as 27% of the respondents confirmed its non availability, while 26% of them showed somewhat availability. The respondents opinions differed in the availability of a comprehensive integrated electronic library with all specialties or continuously availing electronic curriculum for researchers, as an approximate average of 65% showed available and very available, while an average of 36 % showed not available or not existing, and the remaining balance was somewhat available. 46% of the respondents confirmed non availability of the Electronic Curriculum Guidelines Manual, while 25% of them confirmed somewhat availability. 38.5% and 39.5% were available and not existing, respectively, in regards to availability of one special electronic file for each teaching staff member, which was not a satisfactory reliable result in conclusion. That was what had been confirmed by 22% of the respondents who showed somewhat availability.

**Table (2): Clarifies the Values of the Average, Standard Deviation and Chi Square for the Infrastructure Phrases:**

NO	Phrase	Average	Standard Deviation	Chi Square Value	Degree of Freedom	Probability Value
1	Laboratories are well equipped with modern tools.	3.54	0.890	120.700	4	0.000
2	The University has a specialised database of electronic teaching.	3.18	1.284	16.850	4	0.002
3	The University has internet	3.94	0.960	101.600	4	0.000
4	The University has established an integrated portal to provide educational services.	3.01	1.039	67.750	4	0.000
5	The University has a comprehensive plan for using Telecom Techniques for education	3.3	1.097	53.150	4	0.000
6	The University encourages faculty members to use E-learning methods.	3.54	1.074	73.550	4	0.000
7	The University supports research on E-Learning.	3.31	1.253	29.250	4	0.000
8	The University provides a guidelines' Manual of electronic curriculum.	2.73	1.259	16.850	4	0.002
9	The University provides a special electronic file for each faculty member.	2.95	1.349	7.450	4	0.114
10	The University has a comprehensive electronic library integrated for all specialties.	3.04	1.301	18.150	4	0.001
11	The University provides an electronic curriculum that is continuous.	3.09	1.271	16.350	4	0.003
<b>Total Average</b>		<b>3.24</b>				

**Reference: Prepared by the researcher using SPSS.**

Reference table (2), the researcher concluded that there were statistically significant differences, through the probability values of Chi Square less than 0.05 for 99% of the phrases. The respondents answers were biased to be positive, as concluded from the average values of the phrases which exceeded the hypothetical average (3); except the value of phrase, by (2.73) average, which is less than the hypothetical average, indicating that the respondents answers were biased to be negative, so, It was concluded that the university did not have an Electronic Curriculum Guidelines Manual, although it had somewhat well equipped laboratories, an electronic library, internet and financial support , and encourages activation on E-Learning. As the Probability Value of Chi Square (0.114) at significant level (0.05) on phrase (9), the researcher concluded that, there were no statistical significant between the answers of the respondents, and that was confirmed by the respondents percentages, which varied between negative and positive, showing the maximum difference of 1.349 between the respondents answers; so that result was not accepted by the researcher, as it could not be determined to provide a special electronic file that shows information about each teaching staff member including his specialisation ,in details, to reflect his experience, qualifications, activities, thesis, scientific papers and any other academic achievements. Also, the standard deviations in the respondents phrases answers were , generally, varying between (0.089 - 1.349), and were relatively high values that showed no analogy or approach in more

than 72% of the phrases. The researcher concluded that the current infrastructure of Sudanese universities in Khartoum State were not enough for activating E-Learning and adoption as primary educational means in these universities. That was confirmed by 70% of the respondents at an average of 3.24.

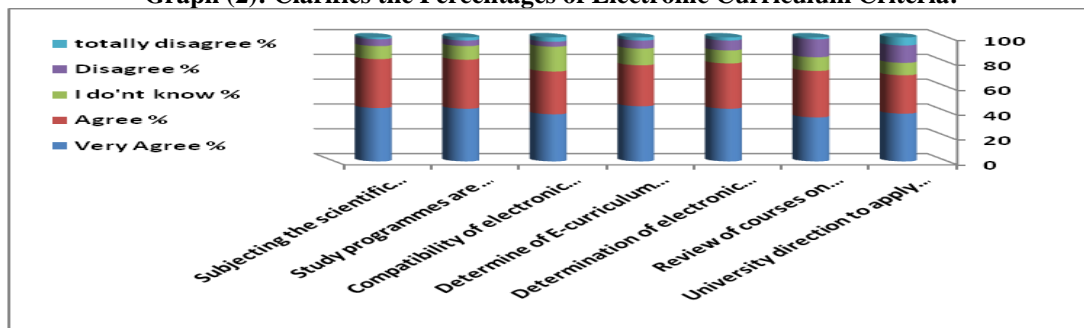
**2. Electronic Curriculum Criteria:**

**Table (3): Clarifies Frequencies and Percentages of the Electronic Curriculum Criteria:**

NO	Phrase	Very Agree		Agree		I don't know		Disagree		Totally Disagree	
		Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
1	University direction to apply electronic education in some courses.	77	38.5	62	31	20	10	28	14	13	6.5
2	Review of courses on computer screen	71	35.5	75	37.5	22	11	29	14.5	3	1.5
3	Determination of electronic curriculum application objective.	85	42.5	73	36.5	21	10.5	16	8	5	2.5
4	Determine of E-curriculum vocabularies.	89	44.5	66	33	27	13.5	13	6.5	5	2.5
5	Compatibility of electronic course structure with the approved international SCORM (analysis-design-development).	76	38	69	34.5	40	20	8	4	7	3.5
6	Study programmes are redesigned electronically by the Electronic programmes designers	85	42.5	79	39.5	22	11	9	4.5	5	2.5
7	Subjecting the scientific material in E-Learning to arbitration clause	86	43	79	39.5	21	10.5	11	5.5	3	1.5
<b>Total Percentages</b>		<b>40.64%</b>		<b>35.93%</b>		<b>12.36%</b>		<b>8.14%</b>		<b>2.93%</b>	

Source: Prepared by researcher using SPSS Programme.

**Graph (2): Clarifies the Percentages of Electronic Curriculum Criteria:**



Source:Prepared by researcher using Excel Programme.

Table (3) and Graph (2) clarify the Frequencies and percentages of respondents options about the extent of their agreement on satisfying the Electronic curriculums and criteria required to achieve its most ideal usage. 76% of the respondents confirmed their agreement on the satisfactory quality of electronic curriculum application, and the ideal usage of electronic curriculum. 82% of the respondents confirmed the importance of designing curriculums electronically by the Electronic programmes designers, introducing the scientific electronic subjects for arbitration clause evaluation, and determine the electronic vocabularies and objectives of their application, so as to agree with the Electronic course structure compatibility with the approved international SCORM.

**Table (4): Clarifies the Values of the Average, Standard Deviation and Chi Square of the Electronic Curriculum Criteria:**

NO	Phrase	Average	Standard Deviation	Chi Square Value	Degree of Freedom	Probability Value
1	University direction to apply electronic education in some courses.	3.81	1.266	78.150	4	0.000
2	Review of courses on computer screen	3.91	1.085	100.000	4	0.000
3	Determination of electronic curriculum application objective.	4.09	1.036	131.900	4	0.000
4	Determination of E-curriculum vocabularies.	4.11	1.029	130.000	4	0.000
5	Compatibility of electronic course structure with the approved international SCORM (analysis-design-development).	3.99	1.030	106.250	4	0.000
6	Study programmes are redesigned electronically by the Electronic programmes designers	4.15	0.960	151.400	4	0.000
7	Subjecting the scientific material in E-learning to arbitration clause	4.17	0.930	155.200	4	0.000
Total Average		4.03				

Source: Prepared by researcher using SPSS Programme.

Table (4) clarifies the average values, standard deviation criteria and the values of chi square criteria of the Electronic curriculum, that showed statistical significance differences between the respondents answers, through the probability zero values of Chi Square which is less than 0.05, for all phrases, when the answers biased to be positive. That was concluded from the average values exceeding the hypothetical average (3), and the standards deviations of phrases were between (10.9 ---.093), which showed analogy between respondents answers, except the direction of applying E-Learning teaching of some courses, that registered 1.266 standard deviation, showing variation and differences in the respondents answers, which the researcher considered as a normal issue on different samples from different universities that adopted different applications, based on the capabilities and specialties of each one. The researcher concluded that the common respondents answers were positive at an average of 4.03, which confirmed their agreement with satisfying electronic curriculum requirements ,as well as the criteria to achieve the most ideal E-Learning teaching methods.

**3. Merging E-Learning with University Teaching:**

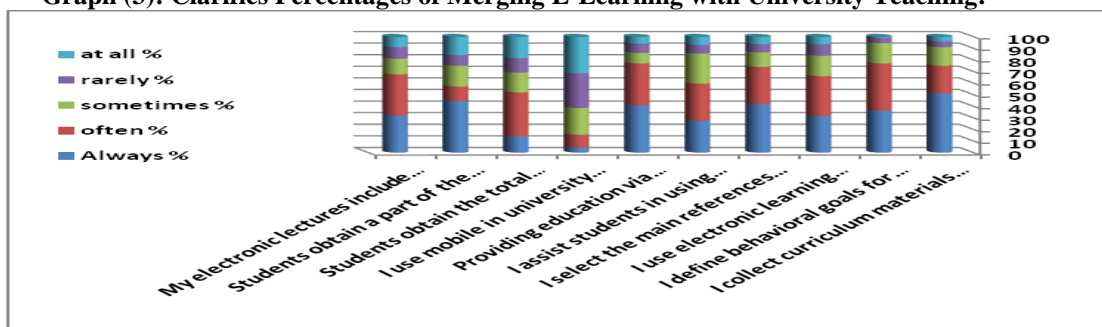
**Table (5): Clarifies Frequencies and Percentages of Merging E-Learning with University Teaching:**

NO	Phrase	Always		Often		Sometimes		Rarely		At All	
		Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
1	I collect curriculum materials from different sources.	102	51	48	24	32	16	10	5	8	4
2	I define behavioral goals for teaching subject in advance.	72	36	82	41	35	17.5	9	4.5	2	1
3	I use electronic learning systems in presenting the course	63	31.5	69	34.5	35	17.5	20	10	13	6.5
4	I select the main references of the course	84	42	64	32	25	12.5	14	7	13	6.5
5	I assist students in using electronic learning systems	55	27.5	64	32	52	26	15	7.5	14	7
6	Providing education via Internet leads to merging E-Learning in teaching.	82	41	72	36	18	9	16	8	12	6
7	I use mobile in university teaching.	9	4.5	22	11	46	23	60	30	63	31.5
8	Students obtain the total content of the course from the Electronic teaching website	28	14	76	38	34	17	25	12.5	37	18.5
9	Students obtain a part of the course total content from electronic learning website	89	44.5	25	12.5	36	18	18	9	32	16
10	My electronic lectures include all what I teach in traditional	64	32	71	35.5	27	13.5	20	10	18	9

way.					
<b>Total Percentages</b>	<b>32.40%</b>	<b>29.65%</b>	<b>17%</b>	<b>10.35%</b>	<b>10.60%</b>

Source: prepared by researcher using SPSS Programme.

**Graph (3): Clarifies Percentages of Merging E-Learning with University Teaching:**



Source: Prepared by researcher using EXCEL Programme

Table (5) and Graph (3) clarify the results of respondents options of universities teaching staff members, towards their readiness for teaching by educational methods that suggest a proposed model for merging E-Learning in university teaching, and approving it as a main teaching tool. A higher percentage of (74% - 77%) showed readiness of the teaching staff members record as Always, Often or Almost in defining the behavioral goals in advance, all from different sources, and selecting the main references of the course and their opinions about providing education via Internet lead to merging electronic learning in teaching, (52% - 68%) of respondents options showed their readiness to use electronic teaching systems in course presentation and presenting all or part of it via the electronic website, provided that electronic lectures should include everything taught during the lecture, same as in the traditional system, and in assiting students to know how to deal with it. Using mobiles for teaching phrase , was of the least percentage record that reached 31% refusal, while 23% showed sometimes and 30% showed rarely records.

**Table (6): Clarifies the Average Values of Standard Deviation Criteria and Chi Square Phrases for Merging E-Learning:**

e	Phrase	Average	Standard Deviation	Chi Square Value	Degree of Freedom	Probability Value
1	I collect curriculum materials from different sources.	4.13	1.104	147.400	4	0.000
2	I define behavioral goals for teaching subject in advance.	4.06	0.897	130.450	4	0.000
3	I use electronic learning systems in presenting the course	3.74	1.190	63.100	4	0.000
4	I select the main references of the course	3.96	1.190	103.550	4	0.000
5	I assist students in using electronic learning systems	3.66	1.163	56.150	4	0.000
6	Providing education via Internet leads to merging E-learning in teaching.	3.98	1.169	115.800	4	0.000
7	I use mobile in university teaching.	2.27	1.151	56.250	4	0.000
8	Students obtain the total content of the course from the Electronic teaching website	3.16	1.337	42.750	4	0.000
9	Students obtain a part of the course total content from electronic learning website	3.61	1.510	79.750	4	0.000
10	My electronic lectures include all what I teach in traditional way.	3.72	1.262	64.750	4	0.000
	<b>Total Average</b>	<b>3.63</b>				

Source: Prepared by researcher using SPSS Programme.

In Table (6) showing the average values, standard deviation and chi square, the researcher found differences of statistical significance in the respondents answers, as indicated in the zero probability values of Chi Square, which was less than the Significant Level by 0.05. 90% of the respondents options were biased to be positive, showing values higher than the hypothetical average (3), although there were great variations and differences between respondents opinions in the standard deviation from 0.897 to 1.510, i.e., relatively high values. Phrase 7 opinions showed negative results, 2.27 average, which was below the hypothetical average (3). They all showed unsuitability of mobiles for teaching. 62% of the respondents confirmed their readiness in using all teaching means, as Always or Often, so as to merge electronic education for teaching, at a good positivity of 3.63 total average values of phrases.

**4. Sudanese Universities Examinations and Students Evaluation Systems for ELearning Programme**

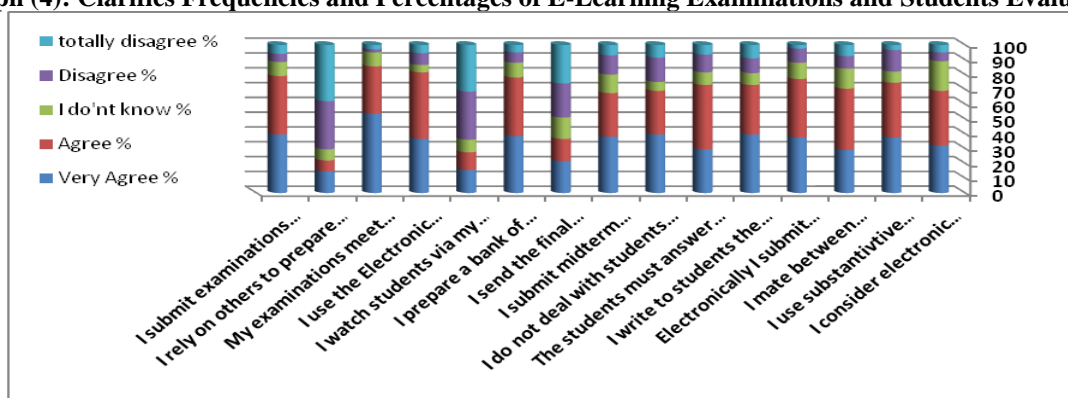
**Table (7): Clarifies Frequencies and Percentages of E-Learning Examinations and Students Evaluation:**

NO	Phrase	Very Agree		Agree		I don't know		Disagree		Totally Disagree	
		Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
1	I consider electronic education examinations as an easy way for students evaluation electronically.	64	32	74	37	40	20	12	6	10	5
2	I use substantive questions in setting an examination	75	37.5	74	37	15	7.5	29	14.5	7	3.5
3	I mate between substantive questions and essay questions.	58	29	83	41.5	27	13.5	17	8.5	15	7.5
4	Electronically I submit midterm examinations at the same time to many groups in different places.	75	37.5	79	39.5	22	11	19	9.5	5	2.5
5	I write to students the worksheets and academic homework in the E-learning website	79	39.5	67	33.5	16	8	20	10	18	9
6	The students must answer the questions electronically on the worksheets and homework.	59	29.5	87	43.5	17	8.5	24	12	13	6.5
7	I do not deal with students answers set on papers , only electronically	79	39.5	59	29.5	12	6	33	16.5	17	8.5
8	I submit midterm examinations electronically at different times for many groups in different places	76	38	59	29.5	25	12.5	26	13	14	7
9	I send the final examination on the subject via the university Electronic Education website	43	21.5	30	15	29	14.5	46	23	52	26
10	I prepare a bank of questions in electronic education to select some of them ,as needed , later on	77	38.5	79	39.5	20	10	14	7	10	5
11	I watch students via my private computer during the Electronic Education examination	31	15.5	24	12	17	8.5	65	32.5	63	31.5
12	I use the Electronic examinations at the final examinations term	73	36.5	90	45	10	5	16	8	11	5.5
13	My examinations meet with behavioural goals , in advance	107	53.5	64	32	19	9.5	4	2	6	3
14	I rely on others to prepare the Electronic examinations	29	14.5	15	7.5	15	7.5	65	32.5	76	38
15	I submit examinations feedback electronically	79	39.5	79	39.5	19	9.5	11	5.5	12	6
Total percentages		33.47%		32.10%		10.10%		13.37%		10.96%	

Source: Prepared by researcher by using SPSS Programme.



Graph (4): Clarifies Frequencies and Percentages of E-Learning Examinations and Students Evaluation:



Source: Prepared by researcher using EXCEL Programme

Table (7) and Graph (4) clarify Frequencies, percentages of the extent of agreement and approval of Sudanese universities teaching staff members on the examinations systems, mechanism of E-Learning teaching students evaluation phrases shown by the researcher, where (70% - 86% ) of the respondents considered E-learning education examinations system was an easy way to electronically evaluate students, and they agreed upon semester examinations, and worksheets or homework, electronically, with the provision of setting the examinations in a way that meet the behavioral goals already defined in the curriculum, by using substantive questions or mating between them and the essay questions; also, with the provision of approving an electronic questions bank , to facilitate selection of questions, whenever needed. The questions must be answered electronically and fed back electronically too. 49% of the respondents confirmed disagreement on sending the final examinations via E-learning education website, whereas, 37% of the respondents had agreed. 64% of the respondents disagreed on controlling the students via private computers during examinations performance, while 28% of them agreed. 70% of the respondents disagreed to rely on others for setting examinations, while 22% only agreed.

Table (8): Clarifies the Average Values, Standard Deviation and Chi Square of E-Learning and Students Evaluation Systems:

NO	Phrase	Average	Standard Deviation	Chi Square Value	Degree of Freedom	Probability Value
1	I consider electronic education examinations as an easy way for students evaluation electronically.	3.85	1.092	85.400	4	0.000
2	I use substantive questions in setting an examination	3.91	1.159	105.400	4	0.000
3	I mate between substantive questions and essay questions.	3.76	1.179	87.400	4	0.000
4	Electronically I submit midterm examinations at the same time to many groups in different places.	4	1.047	118.400	4	0.000
5	I write to students the worksheets and academic homework in the E-learning website	3.85	1.292	92.750	4	0.000
6	The students must answer the questions electronically on the worksheets and homework.	3.77	1.184	102.100	4	0.000
7	I do not deal with students answers set on papers , only electronically	3.75	1.352	81.100	4	0.000
8	I submit midterm examinations electronically at different times for many groups in different places	3.78	1.272	68.850	4	0.000
9	I send the final examination on the subject via the university Electronic Education website	2.83	1.504	10.250	4	0.036
10	I prepare a bank of questions in electronic education to	3.99	1.105	121.650	4	0.000

	select some of them ,as needed , later on					
11	I watch students via my private computer during the Electronic Education examination	2.47	1.435	50.500	4	0.000
12	I use the Electronic examinations at the final examinations term	3.99	1.112	147.650	4	0.000
13	My examinations meet with behavioural goals , in advance	4.31	0.943	198.950	4	0.000
14	I rely on others to prepare the Electronic examinations	2.28	1.411	82.300	4	0.000
15	I submit examinations feedback electronically	4.01	1.121	127.700	4	0.000
Total Average		3.64				

Source: Prepared by researcher by using SPSS Programme.

Table (8) clarifies the average values, standard deviation, Chi square and its Probability value which was below Significant Level 0.05, which showed statistical significance differences in the opinions of the respondents, where 80% of their answers were biased to be positive, the recorded values were higher than the hypothetical average (3), The respondents answers were biased to be negative values, were below the hypothetical average (3), in three phrases confirming disagreement of the teaching staff members respondents. the value of standard deviation was relatively high (0.943 - 1.504), that confirmed differences in the respondents opinions. The researcher concluded that there was a general acceptance for the examinations and students evaluation systems, above 65% and 3.64 positive general average value. The researcher could see the respondents opinions reality towards the two phrases: sending the final examinations via E-Learning education website and the Electronic supervision control during examinations performance, this shall ensure top confidentiality and non disclosure of examinations. Also, students cannot be controlled electronically, as long as the examinations are performed at different places, so, this would not materialize the required credibility. Preparation of the examinations requires an ideal picture that measures the highest degree of understanding and strong absorptive capacity, away from absolute narration of the scientific subject, that doesn't affect the student answers when using a certain reference, what so ever, electronically or traditionally; orconsisting someone during examination. If these terms are not fulfilled for the final examinations, the researcher suggests performance of the examination in the examinations halls and in the university official test laboratories, under direct supervision of present controllers. This will ensre that the teaching staff member lonely relies on his own capabilities, as confirmed by the respondents feedback. The teaching staff member is the only one who sets the examination to measure the required skills and to achieve the required goals for his course.

**The Results:**

The research proposal for merging and approving the E-Learning in university teaching is represented as follows:

**1. Infrastructure:** This represents the availability of laboratories, classrooms specialised for E-learning teaching to view the Electronic curriculum continuously; also, an electronic library for all specialties support, as well as a comprehensive plan to apply communication technology in Education.

**2. Criteria for Electronic Curriculums:** For the optimum usage the following criteria must be available: The contents of the Electronic curriculum should meet the approved international SCORM criteria and to subject the E-Learning scientific matter for Arbitration evaluation. Class tests, worksheets and home works should all be done electronically.

**Recommendations**

1. Availability of an integrated website to provide educational services, availability of an electronic curriculum guidelines manual and a comprehensive plan to apply communication technology in Education.
2. The universities must embrace the E-Learning Systems for university teaching, with attentive care for application , in parallel with the traditional education patterns.
3. Each Teaching staff member must prepare a bank of questions for electronic examinations, for selection as needed.
4. Students examinations and home works performance feedbacks must be electronically presented to them.

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Husham K. Hamatdo. "A Proposed Model of E-Learning For Merging with Sudanese Universities Teaching Programmes in Khartoum State." IOSR Journal of Research & Method in Education (IOSR-JRME) , vol. 8, no. 6, 2018, pp. 66-76.