



The Satisfaction of Students about How Instructional Design Quality Criteria for e-Course in Distance Learning

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Abstract

The purpose of this study is to know the level of satisfaction of Students about how instructional design quality criteria for e-course in distance learning University Imam Abdul Rahman bin Faisal, as the current study aimed to build standards for quality instructional design for e-learning courses via the Internet, this is achieved through the following objectives: identifying key areas in which they can regulate the quality of instructional design for e-learning courses via the Internet, and identify instructional design quality evaluation criteria for such courses and organize them in categories And touchstones to verify meet standards, and building a list of quality criteria for instructional design and indicators for design courses, and propose a method for assessing and measuring electronic Provided by meeting quality criteria for instructional design. And might form a community of Students study e-learning programs for associate University Imam Abdul Rahman bin Faisal, the study found a total of results. Results of the test (t) between the middle grades of respondents (Students have experience in computer skills/experience Students medium to Low in computer skills) to measure satisfaction, value (v) is a statistical function, test results (v) between the middle grades of respondents (average high school/academic rate low) on the scale of satisfaction, value (v) is a statistical function, the test results also showed (v) between the middle grades of respondents (male/female) on a scale of satisfaction, value (v) statistical function at a level (0.01), and calculate the value (α) found it not exceeding (0.02), and this shows that small effect size, and then It cannot be said that there are substantial differences between the sexes (males/females) in the level of satisfaction, satisfaction level the satisfaction of Students in e-learning programs associated with the University of Imam Abdul Rahman bin Faisal one low Provided by environment, as showing a high satisfaction level in the all the vocabulary of first, second and third dimension refers in its entirety to the level of satisfaction is high as the average satisfaction level found in all the vocabulary of fourth, fifth and sixth dimension refers in its entirety to the average satisfaction level, as Low satisfaction level found in all dimension vocabulary VII and VIII IX refers in its entirety to the low satisfaction level, in the light of the Findings of the study, the researcher made many recommendations and proposals.

Keywords:

Satisfaction
E-course quality criteria
Instructional design.

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1. Introduction

No secret rapid tremendous technological advances in all areas of life, not least the field of education, which generated a lot of projects, ideas and terminology that aims to take advantage of these technologies in the area of education, and among these terms, e-courses and e-learning.

Many educational studies confirmed those e-courses and e-learning environments and role in communicating information and construction and the survival of its impact in the minds of pupils which reduces waste by educational institutions (Hanan, 2008).

As the role of the teacher shifts from being a mentor to a mentor, a facilitator and a manager to the interactions between him and the students on the one hand and the students themselves on the other. However, the reality of our schools, students and teachers needs a lot of reform is not pessimistic but this is the reality,

E-courses are a newly emerging terminology in the field of educational technology and which have a deep impact on the learning impact stability, where they use collectively or individually or a few Students, curriculum is content and knowledge Bowl contains interactive educational media pluralism depends on the sense of hearing and sight, audio and video, and using multimedia software and simulation software has become possible to design e-course benefiting learner we can put these files (e-courses) and upload them to the site to become available for larger Number of Students and is a form of individual learning, E-courses provide the teacher and the learner and consolidate their storage media easily accessible anytime and anywhere which widens the spread and easily scanned and indexed and rated, as well as possible to update and change the content of the E-courses smoothly and easily, and to display content more than once (Algareb, 2009; Mohamed, 2013).

Many studies have confirmed the importance of standards and skills in designing E-courses: study, it is worth mentioning that the process of building design E-courses with several stages: analysis: in order to determine the needs of Students, design: determine the logical sequence of educational material, set goals, and to propose methods and activities, calendar, activities, feedback, scriptwriting, development: By putting plans for existing sources and build educational material content, implementation: a learning process and follow up assessment: to evaluate the learning process and returned the entire session for development.

In order to design e-course to be many requirements it needs to considerable time and effort, and you need to be an expert in the curriculum, method and need plenty of effort the teacher to follow each learner individually prepared requires audio-visual-these are all needed material and financial possibilities and need appropriate scientific plan to be devised before starting implementation and need scientific awareness among both the learner and the teacher cares about the educational process and to raise awareness of educational importance affecting the Plans designed, developed and implemented in the educational process, as well as the availability of good instructional design that matches the characteristics and possibilities of learning elements of teacher and learner and curriculum (Abd-Allah, 2013) and that the focus of the current study of the availability of quality criteria for instructional design for E-courses.

And so we can design it to be conducting training programmers for students in colleges of education, and some Arabic countries began to create sites for E-courses for all materials and all lessons give every teacher and every student's name and account number to login to these sites and interacting with them, in order to develop educational reality and belief that this educational process; it shall ensure satisfaction of Students about how instructional design quality criteria for e-course in distance learning University Imam Abdul Rahman bin Faisal (Saleh-Nasir, 2004) Therefore, the researcher picked that title.

2. The Problem Study

Researcher noted that with the increased number of E-courses available online; many cons appeared linked to the design and production of these courses, including: inaccuracies in many elements of the design and production of these courses, like a printed book in electronic form; and why that was not subject to restrictions or censorship of scientific body or institution. And the lack of clear and comprehensive methodology standards for teachers and students rely on selecting the appropriate electronic courses. This was confirmed by Rajamenakshi (2008) until now did not give sufficient attention to e-learning standards; most e-learning products provide an appropriate learning environment for students.

Studies and scientific research, and official reports that e-course in Arabic universities generally suffer from the problem of quality instructional design necessary for holding and using electronic courses, this weakness has led to the low level of usage; the consequent betray modern trends and then confusion level of satisfaction and acceptance toward these courses here crystallized the problem study in question next President:

What The level of satisfaction of Students about how instructional design quality criteria for e-course in distance learning University Imam Abdul Rahman bin Faisal? And branches of the following subsidiary questions:

1. What standards of quality in the design and production of electronic courses?
2. What quality assurance indicators in the design and production of electronic courses?
3. What degree of satisfaction of Students in e-learning programs associated with the University of Imam Abdul Rahman bin Faisal on quality criteria in instructional design for E-courses?
 - General design course and how explained to the student through the entrance course?
 - Learning outcomes and the extent of its Declaration and explained clearly helps students focus their effort in the course?
 - Calendar strategies and use appropriate methods to measure the effectiveness of learning and student progress in achieving the objectives of the course?
 - Educational materials and sources in terms of their quality and efficiency to achieve the objectives set?
 - The integration and interaction with Students through participation in activities and their interaction with the instructor and peers Students?
 - Educational technologies used and their contribution in facilitating the learning process and achieve the objectives of the course?
 - Provide adequate guidance for the learner to access the various support and assistance provided by the provided bys and the educational institution?
 - Students access course content and components and use it to the fullest?
 - General satisfaction about the course?
4. What degree of satisfaction of Students in e-learning programs associated with the University of Imam Abdul Rahman bin Faisal on scheduled environment?
5. Are different satisfactions among learner's associate e-learning programs for University Imam Abdul Rahman bin Faisal differently: gender, academic rate, the level of mastery of computer skills?

2.1. Objectives of the Study

The current study seeks to achieve research goals and theory and practice:

- Design and produce electronic curriculum design criteria standard learner's associate e-learning programs for University Imam Abdul Rahman bin Faisal.
- Know the relationship between satisfactions on quality criteria in course generally email sex, school level, the level of mastery of computer skills.
- Stand on the existence and availability of the needs and requirements of the instructional design criteria appropriate to the nature of the curriculum that is taught in the colleges of education by distance learning programs at the University of Imam Abdul Rahman bin Faisal.
- Select the degree of satisfaction of Students in e-learning programs associated with the University of Imam Abdul Rahman bin Faisal about the extent to which quality criteria for instructional design for E-courses.
- Know the relationship between the General satisfaction about the learning environment for course and contentment about instructional design quality verification in the course.
- Know the relationship between the General satisfaction about the learning environment and course criteria for instructional design quality electronic course.

2.2. Sample Study

A group of students/Students associate e-learning programs for University Imam Abdul Rahman bin Faisal randomly sampling represents the total number of respondents (237).

2.3. Methodology

Follow Finder descriptive analytical study that describes the phenomenon described by collecting quantitative and qualitative information and classification, and then analyzed the relationship between the different dimensions revealed for adequate interpretation and reach general conclusions contribute to the understanding of the present and diagnosis of reality and its causes.

3. The Theoretical Framework

3.1. Design e-Courses

E-courses is based on the integration between art education and e-learning technology in its design, and created, applied and evaluated, and examines its contents and interactive technology student with the faculty member at any time and any place he wants.

Lies the advantages of using e-course in the educational process in that a student could handle the course at any time and any place and not necessarily the presence of plants, the possibility of studying the course and review it several times, working to address the problem of individual differences, eliminate some psychological problems among some students like shy and introverted and encourages them to talk their teachers and peers boldly and courageously, the interaction between student and scientific material and between it and the teacher and between students themselves, provides the opportunity for students to connect you to a wealth of information, allows students the opportunity to learn Scientific material in addition to learn computer skills, the teacher can use multiple teaching methods such as simulation, exploration and learning, learning is based on experience, and individual therapy, the teacher facilitates the process of correcting homework and tests and provide statistics on the extent and progress of students as individuals and as a group, the content is offered in various forms supported by multimedia (Chen & Guo, 2005).

E-course types is divided into several divisions according to their dependence on the Internet through a website on the Internet, an electronic course unsupported offers on CDs containing educational content, submitted directly to the learner, and according to the types of e-learning: E-courses: which replace traditional chapter in full, these courses depend on the Internet and multimedia. Where there is no physical contact between teacher and student, but the student receives a full instruction online. May be providing some traditional lectures such as tests in classrooms, support for traditional classroom courses: which are used along with traditional classroom. Specifying depth records need electronic standards, so use courses to support traditional educational process (face to face) using Web tools and technologies in the process of providing some content, connectivity, integrated courses: depends on the ratio of eLearning education face to face (25% - 75%) (Dabbagh, 2002).

3.2. Instructional Design E-Courses

Instructional design concept: a different procedures relating to the selection of educational material to be designed and analyzed and organized and developed and straightened in order to design curricula to help learn better and faster, and helps the teacher to pursue better educational methods in the least possible time and effort.

The General form is ADDIE Model to design education one of education and design models is the systematic process of education design the designer provides a procedural framework ensures that products are effective and efficient educational goals. General form consists of five-stage design ADDIE education President Form derives its name from, and is as follows: analysis, design, design development, Development, Implementation, implementation calendar. Evaluation.

It consists of electronic Provided by: main page: splash screen, front: an introduction to the unit, page objectives: learning objectives are clarified, some combined front, education/education: explaining the concepts and present information using text and multimedia, check knowledge (app): interactive screen contains a set of drills and exercises, summary page: where will conclude the unit contains learning outcomes, it may also contain instructions, evaluation introduction page : Clear instructions for how to perform the test, the number of questions in the test, points (degrees), and illustrates the scale of perfection, and give instructions on how to start testing, evaluation summary page (the scorecard): test learner degree (percentage), and inform the learner is traversed the unit or not, are encouraged to re lessons if entrees for testing (Downes, 2005).

It consists of course approved electronic E-LMS: Home Course Provided by Homepage, Calendar Tools, Course Provided by tools, Announcements, Discussion Board, CHAT Room, Links, and Document External Course Resources, Homework Drop box, Grade Book, Course statistics, E-Mail Center, Homepages, Blogs, Videoconferencing, Technical Support Manual, Control Panel (Jung, 2000; Wilson, 2005).

And good design of e-course works to achieve the goals of learning, learner interaction also affects satisfaction with learning. Jung (2000) indicating the need to design e-course well to overcome some of the problems of e-learning, there is a set of general criteria to be followed in the design of e-course provided through distance learning programmers can be summarized in the following general criteria (Olivier & Liber, 2001).

- Follow the hierarchy: a main theme, themes.
- Allow the learner to move freely within the course.
- Fit on ' help ' on how to use.
- The ability to determine the student's progress.
- Tailor on the screen resolution of 800 * 1024 pixels.
- That each level contains welcome text.

- That contains page numbers.
- That each level contains a summary of its content.
- Not to assume that the learner will follow a certain order to navigate between lessons, so if the lesson requires previous information you must write a summary.
- If no title contains more than understandable.
- When using audio, you must provide a literal text companion to the sound.

Build quality standards course: is a group of educational and technological specifications set by the educational institution, and applied to the interaction between the e-learning environment and educational programmers and learner to learner and upgrade and develop excellence continuously to deal with hardware and software e-learning and teaching materials published on its networks (Abd-Allah, 2013; Omar, 2009) including: reference: references and sources that were used in building the course content, staff and authors. General information on course: a summary of the course, its objectives, its requirements, a map showing all the parts of the course. Content: content link targets, covering all the goals and ideas and concepts and behaviors involved, interdependence and integration, account management and logical sequence, scientifically and linguistic integrity, broken into small units, compatible with the characteristics of Students.

Design Multimedia: texts criteria: clarity, using three types of lines and three sizes tops, comfortable and easy-to-read fonts, the font size bigger headlines than the text font color contrast sub with background color, punctuation, tracking system and one in writing. Standards of cartoon pictures: express content, clear and simple, avoiding using crowded photo details, realistic, not to overuse, balance between images and text, place the image within the frame. standards associated with video clips and animations: short duration not exceeding 25 30 s, related content, enable the learner stop and repeat, avoid fit screen over video, minimize them as much as possible because it's causing slow loading course, clarity.

Several studies have been carried out to determine the criteria for the production of e-learning resources, targeted. Hassan (2006) developing a list of criteria for production and employment of computer multimedia software and its impact on academic achievement in middle schools, Asmawi and Abdul (2006) electronic virtual university course calendar by Malaysia, the calendar has addressed six main areas: language, grammar, content, objectives, audio, learning strategies, test items, and feedback.

Review of the literature and references on the quality standards of electronic curriculum design (Amin, 2010; Jolliffe, Ritter, & Stevens, 2001; Papastergiou, 2006). Including: the researcher concluded the necessary requirements for the design of e-course including taking Saudi society and Islamic faith. Characteristics mental and cognitive Students. Etc. psychological and logical organization of the course. Sincerity content. Development of self-learning skills in the learner. Employing multimedia elements of text, graphics and audio clips. Taking content to individual differences. Information contacts the faculty member. The possibility to continuously update content. The availability of adequate reinforcement in case the correct response. The availability of guidance for the learner if incorrect answer. Availability answers to exercises and tests. The possibility of using it in multiple formats. The availability of readings. Selecting appropriate activities to the learner and creative thinking. The cost needed for development. Selecting the time needed for development.

From the previous show we find agreement on many previous studies were concerned with providing quality design standards for E-courses offered through eLearning programmers, study agreed (Amin, 2010; Atta Yusuf, 2007; Casper & Leuchavius, 2005; Hanan, 2008; Jamal, 2006; Jolliffe et al., 2001; Khaled, 2008; Papastergiou, 2006; Yaser Hdaib, 2008) study, Rehab Bin Yusuf (2011) examining (Muller & Tschants, 2003) with the current study.

3.3. Study Procedures

First: to answer the first two questions, namely: what standards of quality in the design and production of electronic courses? The quality assurance criteria indicators in the design and production of electronic courses? Follow the following procedures:

1. The researcher to determine quality assurance criteria and indicators researcher access to literature and Arabic and foreign research and studies related to the study, which targeted the electronic learning resources, including calendar: (Anderson & Elloumi, 2004; Asmawi & Abdul, 2006; Dabbagh., 2005; Hassan Al-Bata, 2008; Hassan, 2006; Koohang, Riley, Smith, & Schreurs, 2009; Mödritscher, 2006) and draw the appropriate standards to achieve the objectives of the study. Table 1 data.

In the extension.1 list of quality assurance standards illustrates the design and production of e-course and indicators.

Notes by the previous view that the criteria agreed with Abdel (2011) where it was rated in several areas, each linked to one of the components of the course; which confirms that they are characterized by inclusiveness and integration, covering all elements of the course, the criteria included aspects with a high degree of importance underscored by literature and previous studies such as: general structure of course, and provide support and guidance, and educational objectives of the course, and course content and teaching activities, multimedia contained in course, strategies for education, participation and cooperation And student interaction, calendar, feedback, and page design course, and management course, so that the list of criteria to a

high degree of importance and comprehensiveness, relevance to e-courses calendar spread across the Internet.

Second: A measure of satisfaction for Students: (Extension. 2). After reviewing the conceptual framework and previous educational satisfaction metrics for Students researcher satisfaction scale setting commensurate with the sample, and the scale of (38) finalized fall under nine basic dimensions: (overall design course and how explained to the student through the entrance and the Provided by's introduction, public satisfaction about the course environment, learning outcomes and the extent of its Declaration and explained clearly helps students to focus effort on the course, and use appropriate ways calendar strategies to measure learning effectiveness and student progress in achieving the objectives of the course, Educational materials and sources in terms of their quality and efficiency to achieve objectives, integration and interaction with Students through participation in activities and their interaction with the instructor and Students, peers provide educational technologies used and their contribution in facilitating the learning process and achieve the objectives of the course, provide adequate guidance for the learner to access the various support and assistance provided by the Provided by and the educational institution, facilitate access) browse).

Table-1. Quality assurance standards in the design and production of e-course and their indicators before and after arbitration.

N	Criteria	Indicators before	Indicators final
1	Overall design quality of course and how clear the learner through the doorway and the Provided by introduction.	12	9
2	Learning outcomes and the extent of its Declaration and explained clearly helps students to focus effort on the course.	7	5
3	Calendar and use strategies appropriate ways to measure learning effectiveness and student progress in achieving the goals of the course.	6	5
4	Educational materials and sources in terms of their quality and efficiency to achieve the objectives of the course.	9	6
5	Integration and interaction with Students through participation in activities and their interaction with the instructor and peers.	6	4
6	Provide educational techniques used and their contribution in facilitating the learning process and achieve the objectives of the course.	7	5
7	Provide adequate instructions for learner access to different means of support and assistance provided by the Provided by and the educational institution.	6	4
8	Facilitate access) browse) Students to components and course content and use it to the fullest	8	5
The total final indicators			43

Table-2. Mathematical averages and standard deviations and arranging study sample members on each individual vocabulary first dimension.

Dimensions	Arrangement	MA	mean standard deviation	degree of satisfaction
How to access different components of the course.	1	3.58	1.015	High
Been providing clear instructions about how to start.	2	3.56	1.065	High
The learner is defined by the overall objective of the course as well as the structure of the course.	3	3.55	1.248	High
Clear information was provided on the electronic communication policy in discussions and electronic mailings and all forms of electronic communication.	4	3.52	1.911	High
I've clarified the policy course and stated University policy that must be her learner clearly, or provide a link.	5	3.50	1.327	High
Specifying minimum technological requirements and instructions for use.	6	3.50	1.327	High
The information was clearly about cognitive skills and requirements necessary for the previous course.	7	3.42	1.566	High
Specifying minimal technical skills that must be available to the learner. Electronic self definition provided durable and convenient instructor.	8	3.32	1.064	medium
Course included active offers Students through themselves.	9	2.36	1.051	low
Total Dimension		3.36	1.286	High

Students to components and course content and use it to the fullest), Five graduated responses were also identified for each item Likert Method: (completely satisfied, satisfied, unsure, not satisfied, completely satisfied), then the scale is displayed on a group of arbitrators specializing in education and education technology and psychology where you provide the necessary information for the jury and asked them to read the vocabulary contained in the scale, the researcher has to make adjustments consistent with the views of arbitrators with extensive redrafting and deletion, and then distributed within the meter scale has been applied indiscriminately in principle A number (10) the sample community Students to ensure appropriate application scale in terms of wording and clear lines.

To answer the third question to answer this question and its derivatives extracted arithmetic means and standard deviations and the relative importance of each arrangement of vocabulary for each dimension and major area individually, as shown in the following tables.

1. With regard to the level of satisfaction for the overall design of the course and how explained to the student through the entrance.
2. Regarding the level of satisfaction of learning outcomes and the extent of its Declaration and explained clearly helps students to focus effort on the course.

Table-3. Mathematical averages and standard deviations and arranging study sample members on every single second vocabulary.

The vocabulary	Arrangement	MA	mean standard deviation	degree of satisfaction
All goals and educational skills course illustrated and written from the perspective.	1	3.55	1.031	High
of the relationship between objectives Students or educational skills and activities are very clear.	2	3.48	1.847	High
Educational goals or competencies consistent with the level of course.	3	3.28	1.152	medium
Total Dimension		3.43	1.343	High

3. With regard to the level of satisfaction with the calendar and use strategies appropriate ways to measure learning effectiveness and student progress in achieving the goals of the decision.

Table-4. Mathematical averages and standard deviations and arranging for each study sample members 3.2.3.1 the third dimension.

The vocabulary	Arrange ment	MA	Mean standard deviation	degree of satisfaction
Monitoring policy was announced and the distribution of grades.	1	3.85	1.612	High
Specific criteria were developed and explained to evaluate the performance of Students related to distribution policy.	2	2.78	1.049	High
Selected evaluation tools series and variety and suitable for work or performance to evaluate.	3	3.70	1.148	High
Multiple and diverse opportunities were provided for Students to track their progress in the decision.	4	3.28	1.051	medium
Total Dimension		3.40	1.215	High

4. Regarding the level of satisfaction of the educational materials and sources in terms of their quality and efficiency to achieve the objectives of the decision.

Table-5. Mathematical averages and standard deviations and arranging for each study sample member's 3.2.3.1 fourth dimension.

The vocabulary	Arrange ment	MA	mean standard deviation	degree of satisfaction
I've clarified the target and how to use instructional materials to be used in educational activities.	1	3.54	1.136	High
Been documented (select source) of all educational materials used in decision appropriately.	2	3.34	1.139	medium
Educational material used in the decision.	3	3.19	1.112	medium
Assorted educational material is used in the	4	3.09	1.196	medium

decision.				
Clearly explain the difference between educational materials required and optional learning material.	5	2.65	1.112	low
Total Dimension		3.162	1.139	medium

5. With regard to the level of satisfaction about the integration and interaction of Students with the course through participation in the activities of the course and their interaction with the teacher of the course and their educated peers.

Table-6. The statistical averages, the standard deviations and the order of the performance of the members of the study sample on each of the items.

The vocabulary	Arrange ment	MA	mean standard deviation	degree of satisfaction
Educational activities provided opportunities for interaction that promotes active learning.	1	3.38	1.045	medium
Teacher plan was clearly defined decision and expected time to answer questions and provide feedback on their front.	2	3.27	1.611	medium
A requirement for interaction of Students and participation in the decision was clear.	3	3.20	1.231	medium
Total Dimension		3.28	1.295	medium

6. Regarding the level of satisfaction about the availability of educational techniques used and their contribution in facilitating the learning process and achieve the objectives of the decision.

Table-7. Mathematical averages and standard deviations and arranging study sample members on every single sixth dimension vocabulary.

The vocabulary	Arrange ment	MA	mean standard deviation	degree of satisfaction
Enhanced tools used in decision interaction and active learning among Students.	1	3.31	1.473	medium
The techniques required for decision-ready and easy to obtain.	2	3.20	1.105	medium
Techniques used in the decision.	3	3.16	1.008	medium
Been providing links to the privacy policies of all external tools required in the decision.	4	3.02	1.078	medium
Total Dimension		3.17	1.166	medium

7. Provide adequate guidance for the learner to access the various support and assistance provided by the provided by and the educational institution.

Table-8. Mathematical averages and standard deviations and arranging for each study sample members, 7th dimension.

The vocabulary	Arrangem ent	MA	mean standard deviation	degree of satisfaction
The Help included decision description or a link to a clear explanation of the technical support available to Students and how to get it.	1	3.18	1.241	medium
The Help included scheduled a description or link to University policy regarding the provision of services and especially for people with special needs.	2	2.12	1.150	low
The vocabulary	Arrangem ent	MA	mean standard deviation	degree of satisfaction
The Help included decision description or a link to a clear explanation of academic services and learning resources provided by the University to Students and how to get them and help them succeed in the	3	2.07	1.363	low

decision.				
The Help included decision description or link to clearly explain to student services and learning resources provided by the University to Students and how to get them and help them succeed in the decision.	4	2.03	1.320	low
Total Dimension		2.35	1.268	منخفضة

8. Facilitating access by Students to components and course content and use it to the fullest.

Table-9. Mathematical averages and standard deviations and arranging for each study sample members, eighth dimension.

The vocabulary	Arrange ment	MA	mean standard deviation	degree of satisfaction
Browse lists links helped decision in usability.	1	2.98	1.121	low
Information required for access to all of the techniques used in decision available.	2	2.82	1.056	low
Provided by introduced the alternative means of access to teaching materials in various formats and shapes suit different Students.	3	2.80	1.045	low
He helped design the decision in readability.	4	2.75	1.261	low
Multimedia assisted in ease of use.	5	2.65	1.101	low
Total Dimension		2.8	1.116	low

9. General satisfaction about the decision.

Table-10. Mathematical averages and standard deviations and arranging for each study sample members, 9th dimension.

The vocabulary	Arrange ment	MA	mean standard deviation	degree of satisfaction
E-learning program contributed by Imam Faisal Abdul Rahman University in developing academic tutorial.	1	2.46	1.086	low
I am willing to study and apply again in postgraduate programmers offered by the University of Imam Abdul Rahman bin Faisal via e-learning systems.	2	2.40	1.174	low
In General, I'm satisfied with the study through distance learning programs offered by the University of Imam Abdul Rahman bin Faisal.	3	2.36	1.310	low
Overall, I'm satisfied with the effectiveness and efficiency of virtual learning environment	4	2.32	1.531	low
Total Dimension		2.38	1.275	low

It was extracted arithmetic and standard deviations and arranging all the nine dimensions of each individual vocabulary of each dimension as shown in [Table 11](#).

Table-11. Mathematical averages and standard deviations of the sample responses on the dimensions of satisfaction of Students around the extent to which the quality of instructional design for E-courses on the scale as a whole.

Main Dimension	MA	mean standard deviation	Arrangement	degree of satisfaction
The overall design of the decision and how explained to the student through the entrance and the Provider's introduction.	3.72	0.873	1	High
The extent of general satisfaction about the decision.	3.46	0.897	2	High

Learning outcomes and the extent of its Declaration and explained clearly helps students to focus effort on the decision.	3.31	0.866	3	High
Calendar and use strategies appropriate ways to measure learning effectiveness and student progress in achieving the goals of the decision.	3.23	0.851	4	medium
Educational materials and sources in terms of their quality and efficiency to achieve the objectives of the decision.	3.16	0.497	5	medium
Integration and interaction with Students through participation in activities and their interaction with the instructor and peers.	3.09	0.975	6	medium
Provide educational techniques used and their contribution in facilitating the learning process and achieve the objectives of the decision.	2.83	0.688	7	low
Provide adequate instructions for learner access to different means of support and assistance provided by the Provide and the educational institution.	2.64	0.689	8	low
Facilitate access) browse) Students to components and course content and use it to the fullest.	2.56	0.872	9	low
Total metric as a whole	3.11	0.800	9	medium

Answering the fourth question: and answer this question by determining the degree of researcher pieces that have an acceptable level of satisfaction (133), representing 70 of the total grade for the meter (190), and the following table illustrates this:

Table-12. Shows average loyalty and actual average class college educated grades on a scale of satisfaction.

A college degree is to gauge	the actual average	proposition average	satisfaction level
190	133	98.23	low

Answer to question five, and answer this question researcher calculates the value (v) between the middle grades of respondents (male/female) to measure job satisfaction, the following table illustrates this:

1. for sex (male/female):

Table-13. Shows the results of a test (t) between the middle grades of respondents (male/female) on a scale of satisfaction.

Group	Male N=127		Female N=110		D.H	"T-test"	The indication
	SMA	G	SMA	G			
Satisfaction level	53.58	9.97	46.41	11.38	235	2.34	0.01

2. for the academic rate (high/low):

Researcher calculates the value (v) between the middle grades of respondents (average high school/academic rate low) on the scale of satisfaction, the following table illustrates this:

Table-14. Shows the results of a test (t) between the middle grades of respondents (average high school/academic rate low) on the scale of satisfaction.

Group	High N=212		Low N=25		D.H	"T-test"	The indication
	SMA	G	SMA	G			
Satisfaction level	100.65	14.54	99.45	13.87	235	0.31	No indication

3. with regard to the level of mastery of computer skills:

Table-15. Shows test results (v) between the Middle sample degrees (educated have experience in computer skills/experience Students medium to low in computer skills) to measure satisfaction.

Group	Students have high experience in computer skills N=134		Students have experience medium to low in computer skills N=103		D.H	"T-test"	The indication
	SMA	G	SMA	G			
Satisfaction level	95.47	16.39	97.05	17.51	235	1.01	No indication

4. Discuss the Results

Extrapolating results [Table 2](#) show statistically significant differences in the response to the first dimension vocabulary attributed to having a high satisfaction level towards the overall design of the decision and how explained to the student through the entrance of the decision, where the arithmetic in answering the first dimension vocabulary between high and medium in terms of substantial satisfaction Students ultimately attributed a high level of satisfaction with the overall dimension of the vocabulary of the first dimension (3.36).

By extrapolating the results [Table 3](#) show statistically significant differences in answering the second dimension vocabulary refers in its entirety to a high level of satisfaction with the overall dimension of the second dimension of vocabulary (3.43). By extrapolating the results [Table 4](#) show statistically significant differences in answering the third dimension vocabulary refers in its entirety to a high level of satisfaction with the overall dimension of the vocabulary of the third dimension (3.40). By extrapolating the results [Table 5](#) show statistically significant differences in answering the fourth dimension vocabulary refers in its entirety to the average level of satisfaction with the overall dimension of the vocabulary of the fourth dimension (3.162). By extrapolating the results [Table 6](#) show statistically significant differences in answering the fifth dimension vocabulary refers in its entirety to the satisfaction level average satisfaction level dimensions emerged on the vocabulary of the indicated dimension for each medium of contentment and here refers to the fifth dimension level moderately satisfied; where overall dimension (3.28). By extrapolating the results [Table 7](#) show statistically significant differences in answering the sixth dimension vocabulary refers in its entirety to the satisfaction level average satisfaction level dimensions emerged on the vocabulary of the indicated dimension for each medium of contentment and here refers to the sixth dimension level moderately satisfied; where overall dimension (3.17). By extrapolating the results [Table 8](#) show an average satisfaction level on the first single from their dimension (the seventh dimension), but individual showed up 2, 3, 4 low satisfaction level refers in its entirety to the low satisfaction level; where overall dimension (2.35).

By extrapolating the results [Table 9](#) indicate low satisfaction level in the all the eighth dimension vocabulary refers in its entirety to the low satisfaction level; where overall dimension (2.8).

By extrapolating the results [Table 10](#) show a low level of satisfaction in all the vocabulary of the ninth dimension refers in its entirety to the low satisfaction level; where overall dimension (2.8).

Shown in [Table 11](#) to higher dimensions was the overall design of the decision and how explained to the student through the entrance and a high satisfaction level Provide introduction where the arithmetic average (3.72), and came in second in terms of the level of satisfaction after public satisfaction about electronic Provide environment where his arithmetic average (3.46), came in third dimension learning outcomes and the extent of its Declaration and explained clearly helps students to concentrate effort on a high satisfaction level was due to the arithmetic On it with (3.31), came in fourth place with an average satisfaction level in the calendar and use strategies appropriate ways to measure learning effectiveness and student progress in achieving the goals set with arithmetic (3.23), and came in fifth place with an average satisfaction level materials and learning resources in terms of their quality and efficiency to achieve the objectives set email with arithmetic (3.16), And the back of the field integration and interaction with Students through participation in activities and their interaction with the instructor and peers in the sixth order average satisfaction level average total account (3.09), either in the seventh, eighth and ninth dimension, they come with low satisfaction level with the arithmetic mean to them as of arrangement (2.83), (2.64), (2.56), respectively, provide educational techniques used and their contribution in facilitating the learning process and achieve the objectives of the decision, provide adequate guidance for the learner to access the various support and assistance Provide and the educational institution, facilitate access) browse) Students to components and course content and use it to the fullest. Researcher finds statistically significant differences between the averages of the whole measure Students grades indicate an average satisfaction level, but when you analyze the results of the study sample members answer on the dimensions of the scale on the unit indicate the lack of statistically significant differences between the averages of the seventh dimension Students grades 9th grade, as shown in the [Table \(8, 9, 10\)](#), the researcher recommends the need to pay attention to the standards relating to these dimensions and implementing standard indicators that actually measured through its vocabulary described by gauge.

By looking at the [Table 12](#) we find that the level of satisfaction Students associate e-learning programs for University Imam Abdul Rahman bin Faisal on e low Provide environment, so that the actual average sample below average satisfaction scale this speculation, as it does not exceed (98.23), due to the lack of optimization of e-content environments through decisions published on the Web, and this confirms the scale of dimensions vocabulary some indicators indicate the level of satisfaction Low thereby enhancing Students' dissatisfaction on the environment e-course taught them, in addition to the teaching of e-course require a great effort of the teacher and the educational design may be incongruous and appropriate design criteria for electronic decisions play a major role in the low level of satisfaction among this group regarding the decision environment.

By looking at the [Table 13](#) which illustrates the results of test (t) between the middle grades of respondents (male/female) on a scale of satisfaction, value (v) statistical function at a level (0.01), where the value (v) (2.34), although the value of (t) function, but that doesn't mean that gender has an impact on the level of satisfaction, then they should calculate the value () so that the effect size is the face supplementing statistical significance, and calculate the value () found it not exceeding (0.02), this indicates That small effect size, then it

cannot be said that there are substantial differences between the sexes (males/females) in satisfaction level, this can be explained by the circumstances and prevailing climate is almost one to sample.

By looking at the [Table 14](#), which describes the test results (t) between the middle grades of respondents (average high school/academic rate low) on the scale of satisfaction, value (t) is a statistical function where the value (t) not exceeding (0.31) and is less than the value (t) filtered, this can be explained by the circumstances and prevailing climate is almost one to sample. By looking at the [Table 15](#) which illustrates the results of test (t) between the Middle sample degrees (educated have experience in computer skills/experience Students medium to low in computer skills) to measure satisfaction, value (t) is a statistical function where the value (t) not exceeding (1.01) is less than the value (t) at the table (0.05), this can be explained by the circumstances and prevailing climate is almost the one sample, and this may be due to that deal with E-courses require The great effort of the teacher or the teacher.

5. The Study Recommendations

In light of the results of the study the researcher provided the following recommendations:

1. The proposed programmer student's colleges of education and education technology professionals to develop e-course have design skills.
2. Seek to convert paper to electronic courses.
3. Academic education the importance of e-learning and e-course and its role in achieving effective learning.
4. Introduction of courses called e-learning and e-courses design to identify and deal with e-learning innovations.
5. Training courses to develop the skills to produce and compose develop and manage E-courses for both students and teachers and mentors at institutions of education.
6. The development of e-learning specialization in universities to prepare qualified specialists in the field of design, production, development and management of e-learning and e-courses.
7. Take advantage of open source systems like Moodle in design and production, deploy and manage E-courses to Students.
8. The need for piloting the application of these criteria when designing a number of E-courses and measure its effectiveness to ensure the validity of the findings of this study before adopting them.
9. The application of these criteria when designing e-learning programs E-university Imam Abdul Rahman bins Faisal.

6. Study Proposals

In light of the current study researcher proposes findings and previous studies research:

1. Electronic curriculum design skills among teachers of colleges of education.
2. Interactive studies to study various interactions with e-learning courses and their impact on student learning and satisfaction with learning in e-learning environment.
3. Research design variables screen, content type, and characteristics of Students and their relationship to improve student learning and satisfaction with learning in e-learning environment.
4. Conduct research to measure the impact of E-courses that have been prepared in the light of quality standards in learning outcomes knowledge and skills among Students, and Students ' attitudes towards it.
5. Calendar research of e-course available on the Internet to identify their quality standards.
6. Developmental research to measure the impact of different some page design decision-variables such as education strategies, animated images, and font types and colors-different learning outputs.

References

- Abd-Allah, A. A. S. (2013). *Proposed programmer for the development of e-course Web design skills students education technology at Al-Aqsa University in Gaza*. A Study to Complement this Masters Degree Requirements in Private and as Ways of Education in the Islamic University of Gaza.
- Abdel, M. A. S. (2011). *Quality assurance standards in the design and production of electronic courses*. Paper presented at the Second International Conference on e-Learning and Distance Education, 21-23, King Saud University: National Centre for e-Learning and Distance Education.
- Algareb, Z. I. (2009). *E-courses: design – production – published – apply – straightened*. Cairo: The World of Books.
- Amin, A. Z. (2010). *The impact of two computer programs on the development of the educational technology skills of the teachers of the hearing disabled and their attitudes towards their use in Yemen*. Unpublished PhD Thesis, Institute of Educational Studies, Cairo University.
- Anderson, T., & Elloumi, F. (2004). *Theory and Practice of E-Learning*. Athabasca, CA: Athabasca University.
- Asmawi, A., & Abdul, R. R. (2006). The instructional design Evaluation of a courseware of a Malaysian Virtual University. *Malaysian E-Journal of Instructional Technology*, 3(1), 1-10.
- Atta Yusuf, A. A. (2007). *The effectiveness of a proposed programmer for the development of programming skill to master technology*. Unpublished Thesis, School of Education, Islamic University of Gaza.

- Casper, B., & Leuchavius, D. (2005). *Universal design for learning and the transition to more challenging academic curriculum: Making it in middle school and beyond*. Minnesota: National Center on Secondary Education and Transition.
- Chen, D., & Guo, W. (2005). Distance learning in China. *Journal of Distance Education Technology*, 3(4), 1-5.
- Dabbagh, N. (2002). The evolution of authoring tools and hypermedia learning systems: Current and future implications. *Educational Technology*, 42(4), 24-31.
- Dabbagh. (2005). Pedagogical models for E-Learning: A theory-based design framework International. *Journal of Technology in Teaching and Learning*, 1(1), 25-44.
- Downes, S. (2005). E-learning 2.0, eLearn Magazine. Retrieved from <http://www.elearnmag.org/subpage.cfm?section=articles&article=29-1>. [Accessed 9th February 2007]
- Hanan, I. H. (2008). *Designing and publishing an electronic curriculum in the technology of education in light of the standards of quality of e-learning to develop the cognitive and performance aspects of students of the faculty of education*. Dissertation Thesis Published. Mansoura University, Faculty of Education. Department of Educational Technology.
- Hassan Al-Bata, M. A.-A. (2008). *Scientific, educational and technical standards for electronic discussion forums used in E-e-learning programs and courses*. Paper presented at the Research Presented to the International Conference on Education Technologies 'Education and Technology.
- Hassan, D. A. G. (2006). *Standards for the production and employment of multimedia programs affecting the achievement of preparatory schools*. Unpublished Master Thesis, Institute of Graduate Studies and Research, Cairo University.
- Jamal, A. S. (2006). *A proposed program to develop the skills of secondary school teachers in the use of digital education technology*. Unpublished Master Thesis, Sadat Academy for Administrative Sciences.
- Jolliffe, A., Ritter, J., & Stevens, D. (2001). *The e-learning handbook "Developing and using web-based learning"*. London: Kogan Page.
- Jung, I. S. (2000). Building a theoretical framework of web-based in. *British Journal of Educational Technology*, 32(5), 531-540. Available at: <https://doi.org/10.1111/1467-8535.00222>.
- Khaled, M. M. F. (2008). *Preparation of an electronic course for the students of the department of education Technology Educational and social studies, a periodical journal issued by the system of the faculty of education*. Cairo, Egypt: Helwan University, Cairo.
- Koohang, A., Riley, L., Smith, T., & Schreurs, J. (2009). E-learning and constructivism: From theory to application. *Interdisciplinary Journal of E-Learning and Learning Objects*, 5(1), 91-109.
- Mödrtscher, F. (2006). E-learning theories in practice: A comparison of three methods. *Journal of Universal Science and Technology of Learning*, 28, 3-18.
- Mohamed, A. F. S. (2013). *Proposed programme for the development of e-course Web design skills students education technology at Al-Aqsa University in Gaza*. Unpublished Thesis, School of Education, the Islamic University of Gaza.
- Muller, E., & Tschants, J. (2003). Universal design for learning: Four state initiatives' quick turn around, National Association of State Directors of Special Education.
- Olivier, B., & Liber, O. (2001). Lifelong learning: The need for portable personal learning environments and supporting interoperability standards. Bristol: JISC Center for Educational Technology, Interoperability Standards, Bolton Institute.
- Omar, S. A. S. (2009). *E-courses quality evaluation in the light of the criteria for instructional design*. Unpublished PhD Curriculum and Instruction Department, Faculty of Education, University or Villages.
- Papastergiou, M. (2006). Course management systems as tools for the creation of online learning environments: Evaluation from a social constructivist perspective and implications for their design. *International Journal on E-learning*, 5(4), 593-622.
- Rajamenakshi, S. P. (2008). *E-learning: State of art survey*. Paper presented at the Analysis and Recommendations Towards User Personalized E-Learning Framework Ladis International Conference e-Learning.
- Rehab Bin Yusuf, B. A. H. (2011). *Decision proposed to develop the skills of using e-learning techniques with graduate students in Um Al-Qura University*. Unpublished master College of Arts and Sciences for Girls Education and Psychology Department, University or Villages.
- Saleh-Nasir, I. (2004). *Total quality management in educational institutions*. Oman: Dar El Shorouk for Publishing and Distribution.
- Wilson, S. (2005). Future VLE – the visual version. Retrieved from <http://www.cetis.ac.uk/members/scott/blogview?entry=20050125170206>. [Accessed 9th February 2007].
- Yaser Hdaib, M. R. (2008). *The impact of computer program design based media in the development of ICT skills and the direction towards the Palestine technical college faculty*. Unpublished Thesis, Ain Shams University.

Web Page:

- <https://uqu.edu.sa/page/ar/94510>
- Seven top authoring tools: <http://www.learningsolutionsmag.com/articles/768/seven-top-authoring-tools>
- Top eight free open source LMS : <http://blog.capterra.com/top-8-freeopen-source-lmss>