

The Role of E-learning in Improving Education Quality and Reducing Education Fees during the Pandemic of the COVID- 19

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Abstract

E-Learning is not a new phenomenon after the prevalence of Internet networks, not the total alternative to universities and educational institutions before the prevalence of Kovid 19, and after the importance of e-learning has emerged in front of universities and educational institutions.

Imam Jaafar Al Sadiq University (P) Salah Eddin Branch is one of the educational institutions that govern ministries and government institutions with professional, medical and accounting cadres, Arabic, English and English and the law faced by high efficiency by applying an e-learning experience during the second semester.

Keywords

Four-dimensional Strategy of Competition, Cost, Quality, Time, Flexibility and Creativity, Higher Education, the Higher Institute for Accounting and Financial Studies, Legal Accounting, Cost and Management Accounting.

Introduction

E-Learning is a key to remote learning, and education for a well-known international level and is gradually increasingly increasing at the international level. The importance of e-education has emerged as injuries are exacerbated by COVID 19.

The acceptance of an e-learning method is alternative to direct education, which spends the presence and student in the study hall. The surface emerged in the field of accounting scientific research the need to research the role of e-learning in reducing the quality of education in the sovereignty of COVID 19.

Based on the presentation of the search to address field research for education for an e-learning experience at Imam Jafar al-Sadiq (p) Salah al-Din branch for the academic year 2019-2020.

Research Problem

The surface emerged e-learning as an alternative educational means of the traditional education method for presence university professor and physical student in the lecture hall to achieve university education objectives with relative use of note.

Importance of Research

The importance of electronic education is the one option under COVID 19 to maintain university education and demonstrating the flow of scientific materials into the university student's mind with the departure from the standard deviations of the university student and achieving the objectives of university outputs from cadres, professionalism and reduction and improving the cost of quality of university education.

Research Objective

The research aims at an e-learning statement to be an active alternative to the presence of professor and student in the lecture hall consistent and achieving the cost of quality education in the lecture hall consistent and reduce the quality of education borne by the Foundation and student expenditure costs in the present.

Research Hypotheses

Research is assumed that e-learning has achieved the objectives of university education at Imam Jaafar Al Sadiq University (p) Salah al-Din branch for Rasi (2019-2020).

Research Limits

Imam Jaafar Al Sadiq University (p) Salah al-Din branch for the year (2019-2020).

2. Theoretical Framework

1. Costs of Quality Education

Quality of Education

Quality in education is the real driving force and is required to push the educational system effectively to achieve its objectives and advise it by society and various parties related to education.

Quality standards in education means that specifications and conditions should be met in the education system, which is the quality of management, admission and educational programs, and the quality of teachers, ethnicities and material equipment to lead to outputs and to meet the needs of beneficiaries. (Ali, 2002).

- i. The idea of a four-dimensional strategy is a recent shift in vision for both quality, cost and time to take a strategic path in line with a highly competitive environment, and points of difference can be diagnosed as follows:
- ii. Concept Quality

The great and growing interest in quality costs must be addressed to the quality through which they are recognized. Quality recognized by International Organization for Standardization (ISO) that it is classified by the needs and virtual expectations and forecasts throughout the main properties predetermined. It was also known as producing products or providing disadvantages and conformity for specifications, other standards and standards (Goetsch & Davis, 2006: 3). Some know it is determined by how much product or service is successful and the extent of user goals in the process of use (not only at the Point Point) (Hoyle, 2007: 10). Sumners, 2009: 49) suggest that quality is only matching needs or requirements. The American society also known as the group of features and characteristics of the product or service or making its implementation of customer satisfaction specifications at the time of purchase and during use Horngren, 2012: 671).

- iii. The concept of quality costs

It has been known as the cost that is aimed at preventing or arising as a result of the production of poor or low quality products (Horngren, 2006), and I knew as a costs set by the company to ensure that the product or service is provided to the customer according to its requirements and expectations (Jubouri, 2008).

All costs that will disappear if the production is without disadvantages (Zaklouta, 2011). Al-Kawaz and Josepens indicated that the quality became necessary and should be met in any economic unit wish to stay and continue the market, because the customer was at least less protected for the poor quality. Alkawaz and Joseph, 2011). While quality is classified into two major categories, they are the costs of matching, lack of conformity and shape (1) following this:

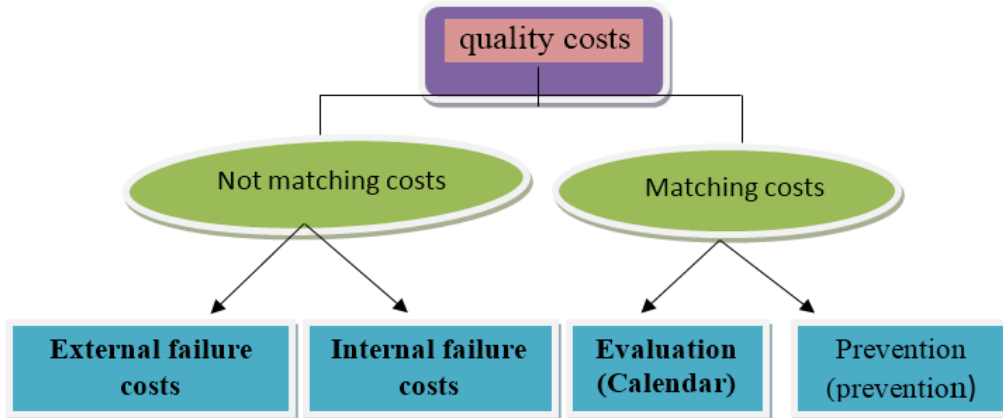


Figure 1 Quality costs according to conformity and lack of conformity

Source: Jassim, Raghad Hashim, "Quality Cost Relationship in a way and its impact on reducing costs" Management and Economics Journal, IVI, 2008.

iv. Categories Quality Costs

Quality costs were classified into four varieties

1. Prevention costs (prevention): which occur to prevent (or costs established as a result of low quality product (HornGren 2009). The cost of prevention, which is synchronized with or arise because of the activities of preventing defaults in products, services, direct and indirect costs on training, education, quality and quality engineering activities, and quality engineering, as well as the activities of interest in quality, Keep calendar and minimum failure costs (GUPTA, 2001 & Superville).
2. Evaluation costs (calendar): The costs are evaluating the costs of determination. Evaluation costs are the costs that occur to discover those individual units from the product is not identical to the specifications (HornGren, 2009).
3. Internal failure costs: The costs resulting from the activities required to correct processes, products or defective products that have been identified before they reach customers, internal failure activities activities do not add value and can be very expensive especially for the loss of operation time. Although the process time can be the most difficult it is the most difficult measurement because it can affect the future sales of (Hilton Economic Unity, ET, 2003).
4. External failure costs: The resulting costs are when products or services are not identical to the specifications (MORSE, et. al, 2002). External failure costs are known as costs that occur to discover a defective product after customers (Horngren, 2009).

5. The costs of internal and external failure are similar but vary in terms of internal failure costs include poor quality within the economic unit while external failure costs include inequalization costs outside the economic unit, and moreover, the cost of internal failure affects the organization of economic unity while external failure Cause problems with customers and harm the reputation of the economic unit. (Thomasson & Wallin, 2013).

Entrance in e-learning

Under the many and accelerated variables, e-learning has become an inevitable necessity for all developed or developing societies and is adequate (2009). In addition to the availability of rich information sources, and adopt the learner on the same knowledge and expertise add effective learning tools, which stimulates self-learning skills, an interesting learning skills and enjoyment of learner properties, and is the best way to create future generation for scientific and practical life and in accordance with Data of the times.

The Concept of e-learning

E-Learning is known as: "Method of Education using modern communication mechanisms from its multimedia, image, image, graphics, search mechanisms and electronic libraries, as well as the portals of the Internet, whether remotely, or in the semester. (Mousa, 2002).

As well as ": one of the forms of distance education that depends on the possibilities and tools of international information, Internet and computers for a mechanism in studying specific educational content through continuous interaction with professor, learner and content. (Abdul Aziz, 2008).

"There is a technological speaking based on an interactive learner based on the learner, and is well designed well in the light of the appropriate educational design principles of the open and flexible learning environment, Internet sources and digital techniques are used and available to everyone, anywhere." (Semi and Ismail, 2008).

Types of e-learning

i. Synchronous E-Learning (Synchronous e-learning)

Education is one of the types of e-learning, an information-based information method and techniques for information network to deliver and share lectures and researches between learner and teacher at the same time to teach article via: (Abdul Hamid, 2010).

- Instant chat rooms Real-time Chat.
- Virtual Classes (Virtual Classroom).
- One of the prosecution of simultaneous e-learner has an immediate and reduced feedback.
- Cost, effort and time.
- Synchronous e-learning tools.
- Virtual Classroom (Virtual Chapters).
- Video conferences (Asynchronous e-learning).
- Whiteboard (Interactive White Board).

ii. Asynchronous E-Learning

It is indirect education, the learner receives sessions or quotas in accordance with a scheduled program where the times and places is commensurate with their conditions by employing some of the methods and tools of e-learning such as: (Al Halfawi, 2011; Atwan and others, 2010).

- E-mail (E-Mail)
- World Wide Web
- Mailing Lists (Mailing List)
- Discussion groups (Discussion Groups)
- Move Files (FILE Exchange)
- CDs (CD)

The prosecution of this type of education is that the learner chooses time and time to end the educational material, restoration and study and reference electronically in any time.

It is his negative non-learner to get immediate feedback from the records directly.

E-learning forms

Collect electronic learning forms to include a range of shapes and are as follows: (Comerchero: 2005: P1):

i. E-learning Using CDs

The 1980s witnessed the use of CD-ROMs, but the interaction was lacking the interaction between the article and learning, and since the developments of this pattern had

subsequently included on educational programs designed in a way that availability between the two directions and the student.

ii. E-learning Using the Internet

In this type of education, the educational institution designs its own location, materials or programs. This pattern allows learners to communicate from anywhere outside the university and follow their lessons and discuss the lecturers according to specific time schedules and therefore content in that type of education is electronically stated at the Internet.

iii. E-learning Using e-books

The e-book or any print is generally applicable, electronically distributed through Internet, e-mail, direct transport and transportation on any different storage media, and electronic books began using e-learning at the beginning of 2000 as an experiment Some United States schools.

The Field Study

The study was based on a group of students in the fourth phase in the Department of Accounting / Faculty of Administrative and Financial Sciences at Imam Jafar Al Sadiq (P) Salah Eddin Branch to learn about the use of e-learning by students and professors for 2019-2020.

1. Size Sample Search

The real mirror research sample is to learn how to develop education under the COVID 19 pandemic, and arising from progress in e-learning and the use of sophisticated education for the purpose of promoting education in these difficult circumstances. Where the sample of the teaching body was formed in the accounting department of the fourth phase and its number (6) professor of high testimony, and the students of the phase and its number (32) student for 2019-2020.

The question of the questionnaire has been made to a sample consisting of the accounting section and fourth students. The averages of the axes will be calculated from three main axes:

Table 1

	ITM	I agree	I totally agree	neutral	I do not agree	Strongly Disagree	Average Arithmetic
1	Do you agree that the article raised through direct education in the lecture hall is the best and greatest of the article through e-learning?	80	48	3	2	0	4.433
2	Do you agree that e-learning is a way to make better than the direct lecture?	20	0	36	28	0	2.8
3	Do you agree that e-learning is a fighter way for continuing education as long as the lecture is broadcast through websites while the direct lecture ends at the time of lecture cannot be referenced?	85	8	33	0	0	4.2
4	Do the costs are improving and decreasing through the electronic lecture for the student who does not cost orphanage, not costs, transport and nutrition expenses ... etc. As for university professor also decreases the same costs?	90	24	3	10	4	4.366
5	Do you agree that e-lecture costs are less expensive than the direct lecture for the college that bear transport, heating, lighting and cooling expenses?	80	24	6	4	0	3.8
6	Do you agree that the electronic lecture is a scientific interface linking the university and college with Iraqi and international universities and raises the status of the certificate?	75	32	15	4	0	4.2
7	Do you agree that the Imam Sadiq University (p) Salahuddin branch has achieved similar results to government and civil universities through e-learning?	70	24	30	0	0	4.133
		500	160	126	48	4	27.933

Note from Table 1 that the at least averages of the teaching body and students

The axis of the use of e-learning was (Do you agree that e-learning method is a way to make better than the direct lecture method). Either the highest averages were (Do you agree that the material posed by direct education in the lecture hall is the best and most prominent of the article through e-learning), where they received (4.433) degrees.

The table is also illustrated that the arithmetic average is of the importance of the demands of using e-learning needed to be provided in university education approaches, which ranged between (2.8 - 4.433) Where the response to the sample was on all paragraphs of this axis.

Table 2 Calculation of contrast and standard deviation of the e-learning

ITM	standard deviation	Contrast	ratio	CalculatedT
1	35.983	129.48	88.666	4.417
2	16.346	26.719	56	2.766
3	36.065	130.07	84	4.184
4	36.636	134.22	87.333	4.351
5	33.274	110.72	76	3.783
6	30.474	92.87	84	4.182
7	28.726	82.519	82.666	4.113
TOTAL				3.972

The above table is that the value of T has reached average anxiety of electronic education by students and teaching authority (3.972), a statistically significant (0.05) level, indicating statistically significant differences between the average degrees of students around the axis of education We also see for e-learning. With regard to the paragraph of the proportion, the response to the response of the sample's response to the question addressed through the questionnaire forming that the first paragraph (88.666%) is the largest response and conformity with the views of the respondents, and then paragraph 4 (87.333%) and then the sixth paragraph, where they received (84%) and so on.

Table 3 The arithmetic averages for the items for questioning the axis of the article professor

ITM	I agree	I totally agree	neutral	I do not agree	Strongly Disagree	Average Arithmetic
Do you agree that the presence of the article professor in education for Electronic is to attend my photos, while the presence of the professor in the direct lecture is a scientific and educational presence and a father?	65	24	0	22	0	3.7
Do you agree that the electronic lecture cuts between professor and student once the time of the lecture while some students are interviewed with the professor after the lecture?	35	64	15	4	0	3.933
Do you agree that the e-lecture hides the professor monitoring and tracking outstanding students and outstanding students?	60	60	6	2	0	4.266
Do you agree that the electronic lecture is an opportunity to shorten and summarize the article.	65	56	3	0	2	4.2
Do you agree that the direct lecture is in the mind of the student while the electronic lecture gives an opportunity for mental solids?	80	16	15	10	0	4.033
Do you agree that the electronic lecture increases costs on the student and on the college by holding computers and purchasing Internet services?	50	52	12	0	3	3.9
Do you agree that the lecture of e-learning is incorporated by the character of the professor with means of means of means that the means of clarification on the character of the professor?	45	16	24	6	2	3.1
Do you agree that the electronic lecture reduces and improves the costs of illustrations?	65	36	12	8	3	4.133
TOTAL	465	324	87	52	10	31.266

Note from Table 3 that the at least averages of the teaching body and students.

The axis of the use of e-learning was (Do you agree that the lecture of e-learning has been integrated by the character of the professor with means of means of clarifications". Professor monitor and follow outstanding students and outstanding students) where they got (4.266) degrees. It is also clear from the table that the arithmetic average is of the importance of the demands of e-learning by Professor (3.1-4.266).

Where the response to the sample was on all paragraphs of this axis.

Table 4 Account of contrast and normative deviation of the professors

ITM	standard deviation	Contrast	ratio	CalculatedT
1	26.555	705.168	74	3.679
2	26.349	694.269	78.666	3.912
3	31.476	990.738	85.333	4.248
4	32.399	1049.695	84	4.183
5	31.830	1013.149	80.666	4.015
6	25.589	654.796	78	3.878
7	17.082	291.794	62	3.067
8	25.801	665.691	62	3.679
TOTAL				3.832

The above table is that the value of T has reached the average axis of professors (teaching body) has reached (3.832) and statistically at a significant level (0.05), indicating statistically significant differences between the average teaching body on e-learning axis. With regard to the percentage paragraph, the response to the response to the question is responded by the questionnaire. Third paragraph (85.333%) is the biggest response and conformity with the views of the respondents, and then paragraph 5 (80.666) and after which the second paragraph has received (78,333) % And so on.

Table 5 Arithmetic averages for the quality of the calendar

ITM	I agree	I totally agree	neutral	I do not agree	Strongly Disagree	Average Arithmetic
Do you agree that the e-exam does not fit to be a standard in calculating student's degree in all exams?	55	72	3	0	0	4.333
Do you agree that the electronic exam is reduced and improves direct examination costs by reducing stationery, surveillance, auditing, correction and reducing costs.	55	44	6	12	0	3.9
Do you agree that electronic examinations are giving fraud opportunity through ghostly questions (health and error).	50	64	6	0	2	4.066
Do you agree that e-examination through the e-exam gives the Certificate of the International Trust and Procedure and Recognition and Reduces Cost of Recognition abroad?	30	28	27	14	1	3.333
Do you agree that electronic exams increase the ability of outstanding students in excellence and achieve the highest scientific superiority?	35	28	3	28	1	3.166
Do you agree that the argument of the non-Internet and the high cost of obtaining a weak argument in refusing electronic examinations?	25	8	12	24	7	2.533
Do you agree that the evaluation of the student's performance in the e-exam is better and highest way of evaluating the performance of the direct examination and less cost and better quality?	65	24	0	22	0	3.7
TOTAL	315	268	57	100	11	25.03

Note from Table (5) that the least averages of the degrees of faculty members and students

The axis of the use of e-learning was (is agreed that the argument of non-Internet and the high cost of obtaining a weak argument in refusing electronic examinations). The highest averages were (Do you agree that the electronic lecture hides the professor monitoring and tracking outstanding students and students), where I got (4.333). It is also illustrated by the table that the arithmetic average of the importance of student calendar demands for a distance study with educational means providing and confident in the university and reducing the costs of the study, which ranged between (2.533 - 4.333) Where the response to the sample was on all paragraphs of this axis.

Table 6 Calculation of contrast and standard deviation of calendar axis

ITM	standard deviation	Contrast	ratio	CalculatedT
1	34.777	120.95	86.666	4.317
2	24.511	60.079	78	3.877
3	30.245	91.479	81.333	4.047
4	12.349	15.25	66.666	3.288
5	15.795	24.95	63.333	3.131
6	8.700	7.57	50.666	2.470
7	26.555	70.55	74	3.177
Total				3.472

The above table is that the value of T has reached an average calendar axis has reached (3.472) and statistically at a significant level (0.05), indicating statistically significant differences between (student, teaching body) the focus of e-learning.

Either regarding the percentage of response to the response to the sample personnel to the question via the questionnaire finds that the first paragraph received (86.666%) is the biggest response and conformity with the views of the respondents, and then paragraph 3 (81.333) and then paragraph 5, where they received (63333) And so on.

Since the calculated on the search hubs are less than the tandemation authorized to accept the research hypothesis that an e-learning has achieved the objectives of university education at the University of Imam Sadiq (p) Salah al-Din branch for the year (2019-2020). It is a successful experience of e-learning under COVID 19.

Conclusions

The most important conclusions reached are:

1. The University of Imam Sadiq (P) Salah al-Din branch was keen to apply quality standards in e-learning for the second quarter of the academic year 2019-2020 and

- provided electronic educational services to students free of defects and received the satisfaction of graduates.
2. Match the Ministry of Imam Sadiq (p) Salah Eddin branch model of conformity costs.
 3. The University of Imam Sadiq (P) Salah Eddin branch was used to branch of prevention costs or prevention costs for preventing low quality electronic service and achieved efficient e-learning and training.
 4. The University of Imam Sadiq (P) The Salah Eddin branch of evaluation was used to monitor sections and deanship to e-learning to prevent the incidence of internal activity to increase costs during e-learning and preventing the cost of external failure and reduced the efficiency of a graduate and lack of efficiency in the labor market.
 5. 5.The University of Imam Sadiq (p) Salah al-Din branch was used all e-learning tools represented by electronic chat rooms and other means of electronic education (disks Compact, internet ... etc.,)
 6. The University of Imam Sadiq (P) has proven that e-learning can be a successful educational alternative to direct education, which requires an physical attendance of the professor and student at the classroom, which is consistent and to achieve the reduction of the quality of education for the college and university.

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