THE LEARNERS' SATISFACTION TOWARD ONLINE E-LEARNING IMPLEMENTED IN THE COLLEGE OF APPLIED STUDIES AND COMMUNITY SERVICE, KING SAUD UNIVERSITY, SAUDI ARABIA: Can E-Learning Replace the Conventional System of Education?

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ABSTRACT

The growth of distance education course offerings is an indication of its importance to students. The purpose of this study is to investigate learners' satisfaction toward online e-learning implemented in the College of Applied Studies and Community Service, King Saud University, Riyadh, Saudi Arabia. In the meantime, also, this study was conducted to assess whether substitution of conventional learning with e-learning can improve the educational standard and knowledge of people especially in this information world. The target group consists of 201 university students (female) from the College of Applied Studies and Community Service. The results of the statistical analysis demonstrate that students' satisfaction has been very positive toward e-learning as a teaching assisted tool, and provides more benefits than conventional learning.

Keywords: E-learning; Distance learning; Learners' satisfaction; Saudi Arabia

INTRODUCTION

Recent developments in modern information and communication technology (ICT) have enabled transmission of knowledge from lecture to learners (also) via internet (Raymond, F., 2000). Distance education has become an important way of education in the modern world (Wang, C. and Liu, Z., 2003). At the early beginning the very first form of distance education was delivered with the usage of traditional mail (e.g. printed materials) (Raymond, F., (2000), Wang, C. and Liu, Z., (2003), Martey, A., (2004), and Rao, S., (2006). But nowadays, distance education is mainly supported with modern ICT (Martey, A., (2004), and Rao, S., (2006). This type of distance education is in literature known under the term e-learning (Learner Online, (2008), Lee, Y. et al., (2007), and Roffe, I., (2002)). E-learning represents a great proportion in distance education. Thus e-learning efforts and experiments currently receive enormous attention across the globe. Essentially, e-learning unlike traditional learning, is another way of teaching and learning. Khan, B.H. (2001) defines that e-learning encompasses Web-based learning (WBL), internet–based training (IBT), advanced distributing learning (ADL), and online learning (OL). Moreover, by another definition, e-learning includes instruction delivered via all electronic media such as the internet, intranets, extranets, and hypertext/hypermedia documents (Govindasamy, T. 2001). Thus from e-learning definitions it acknowledges challenges posed by diverse learners and instructors. Measuring e-learning student satisfaction has been a "hot topic" for the academia.

At the AMCIS conference as early as 2001, e-learning was identified as one of the nine meta- tracks for Information systems (IS) discipline, and multiple studies in both education and the IS literature measure student satisfaction with the online courses (Arabasz P. and Baker M., (2003), and Summers, J., et. al., (2005)). Research shows that perceived usability, perceived value, perceived quality are critical factors that affect user satisfaction for e-learning systems (Chiu, C., et, al., (2005), and Seddon, P. B., (1997)). Clearly, understanding the factors influencing user's satisfaction with online courses is a critical issue for researchers and practitioners alike. E-learning can be delivered in the following modes: self-paced on-line learning using internet; self-paced off-line learning using local desktop, CD-ROMS without connecting to the internet; group learning synchronous-online face to face chat sessions, virtual classrooms; group learning asynchronous-email, Wikis, Blogs, discussion boards. Course content: Learning Content Management System (LCMS) provides the environment to maintain a repository and manage learning content. Course delivery is independent of content management. Academic circles can help in creating the basic contents for the subject offered and periodically update the contents. Course design should be orchestrated among academic content providers, presentation group-graphics, programming community and other technical staff.

Content Authoring Tools Are Available To Prepare Course Material for E-Learning

It is also possible to develop a simple e-learning kit using HTML, java script programming and a little bit of flash. Some of the tools provide simulations for natural laws antiscientific phenomena so that learning is enabled through visualization. Computer- Based Training. Interactive session- Synchronous mode of e-learning.

Course delivery plan

Online course design and delivery requires resources and meticulous planning. Course design requires skilled resources from different disciplines such as graphic art, web design & programming and people to manage infrastructure apart from subject specialists. Methods such as asynchronous discussion forums if not monitored closely, could prove inconclusive without much help to the participants. At the organizational level it may be prudent to divide the learners into small groups to increase the effectiveness of discussions and chat sessions.

Learner Registration

Conventional student registration is a tedious process- a number of requirements need to be satisfied before a student's is eligible to register. In the case of e-learning, it is almost instantaneous with only a few requirements to be met. A prerequisite for e-learning is planning and preparedness as it involves orientation and adaptability to technology. In contrast, conventional classroom type of education may not require high preparedness and detailed planning.

Assessment

Assessment is a measurement of learning outcomes. In an e-learning environment, assessment takes place through the internet/intranet. Classroom learning is ideally suited for moderation and assessment of projects, lab work, etc. In the case of e-learning, e-moderation can be done in two ways using either the synchronous or asynchronous mode. In the synchronous mode, it is more like real-time conversation using audio/video conferencing where participants communicate to enhance their learning in the asynchronous mode; participants post their views as text messages at different times convenient to them. On-line evaluation of e-learning outcomes is very quick especially those with multiple-choice questions, e-learning on IT/IS and software subjects use multiple choice type of evaluation.

Unlike assessment in the conventional education system, e-assessment is prone to unfair practices because of the high flexibility it offers. Sometimes, feedback from learners and issues faced by them during learning could assume complex proportions.

Distance education as it is called and popular even now frees the learner from attending classes. Printed course material is delivered to the learner who is expected to go through the content, understand and submit assignments mentioned therein, take examinations and record achievements. The advantage is that the learner is able to devote time to the printed material as and when he or she can. The disadvantage is that non-printed material such as simulations and discussions would not be available. E-learning scores over conventional distance education in these aspects.

Successful implementation of e-learning is not easy; a lot of effort and care is needed for course design, course delivery, assessment and fine-tuning based on the course feedback. Also, impact measurement studies based on the course delivered should also be conducted. The important aspect of e-learning is the extreme flexibility it offers – learning at one's own pace. There is no cost of commuting to the campus and other expenses incurred in the conventional system resulting in considerable cost benefits. Furthermore, this is a very convenient mode of learning for physically challenged persons. Since learning is asynchronous, e-learning can be balanced along with other commitments like family and work. It is not necessary that e-learning caters only to basic education.

Technology and infrastructure are required for successful implementation of e-learning; with hardware prices going down day by day and bandwidth getting more and more affordable, e-learning is set for massive proliferation with virtually very little constraints on the technology front to hamper its growth. Yet there are strong voices against e-learning–it is devoid of teacher-student relationship which is ever so important and part of the conventional education system. Another major issue cited against e-learning is the feeling of isolation experienced by learners, unlike in campus education where there is scope for continual interaction of learners with teachers and among themselves. A hybrid form of education – perhaps conventional education suitably augmented with e-learning for specific topics with multimedia and simulations should go a long way in enriching the conventional education system. Finally, e-learning is not an inexpensive option either. Though e-learning is growing at a rapid pace - it will not completely, at least in the near future, replace the conventional education system.

LITERATURE REVIEW

Distance online education is defined as "a General term used to cover the broad range of teaching and learning events in which the student is separated (at a distance) from the instructor or other fellow learners" (Hoyle, G., 2007).The effectiveness of online education is still an unanswered question. Many universities are opening new centers while others are closing their doors. Industries have adopted virtual learning to train their employees (Weekes, S., 2007). Some colleges are creating articulation agreements and partnership with industries to provide training to staff development programs (Bird, L., 2006). Administrators in colleges and universities are dedicating a major portion of their financial resources in the development and facilitation of anytime/anywhere virtual learning. Some researchers proved that F2F classroom modality was the best way to encourage and motivate students (Mentzer, G. A., et al., 2007). Some researchers demonstrated that blended hybrid learning was the least cost effective (Mackay, S., and Stockport, f. J., 2006); students and faculty liked the benefits of time flexibility in blended courses.

However, they consider finding time to develop such courses was a challenge (Vaughan, N., 2007). There were other researchers who considered that e-learning was the biggest growth in higher education (Rosenberg, M., 2001). Finally, there are some researchers who compared all three delivery modalities and found that all students acquire course content equally regardless of delivery mode (Tang, M., and Byme, R., 2007).Many faculty members feel that it is the 21st century, and offering course via Internet is becoming a strategic necessity among competitive universities (Lee, Y. et al., 2007). They look at the opportunities that distance education may provide universities, such as, increased enrollment, extra grants from different foundations, and most of all, widening the student body by offering global access (Papp, K. et al., 2001). On the other hand, some faculty members perceive students in an online class have the tendency of cheating more compared to in class modality because they are not monitoring the students; they feel that institutions should address academic dishonesty (Grijava, et. al., 2006). Others are still skeptical and resistant to change when it comes to distance online education. They examine the retention rates of online courses, with student dropout rates of thirty-two percent compared to a four percent dropout rate for students enrolled in a F2F classroom course (Liu, S., Gomez, et al., 2007) and remember the sixties era and the failures of distance education when they tried to offer correspondence.

Empirical data identify some of the factors that influence student satisfaction toward online education such as: student control, instructor rapport, enthusiasm, group interaction just to name few (Lee, Y. F. H., 2007). Researchers reveal that there are some concerns in student achievement and motivation, and that the level of interactivity plays a major factor in student motivation (Mahle, M., 2007). Buckley states that there is a paradigm shift between F2F classrooms and online courses. He specifies that in the F2F classroom, responsibilities of course pace and material covered reside with the faculty member. The faculty decides the content of the course, how to deliver the course, and what kind of learning styles to use. In the case of Online learning courses, the responsibilities of learning fall on students. He recommends that students who recognize the paradigm shift and are willing to take that responsibility will favor online education more than F2F classroom learning. Moreover, he recommends that colleges and universities address the effective institutional transition by developing staff development programs to train their faculty (Buckley, D. P., 2002).

Here, we refer to the experience of the Kingdom of Saudi Arabia in the application of e-learning and distance education, which is one of the leading and promising experiments in the Arab world. Saudi Arabia has announced officially the application of distance learning, and to achieve these goals, leading towards the future has launched initiatives to establish infrastructure for higher education and distance education, the initiative is to bridge the gap (Tajseer), the e-learning educational portal system, the learning management system (Jusur), the award in university for e-learning excellence, the national repository for learning objects, Taiseer service for e-learning and the establishment of Saudi national Center for and distance education (www.elc.edu.sa). However, most of the courses in universities in Saudi Arabia are taught mainly in the classroom. Some of them adopt e-learning to supplement the face-to-face instruction for certain purposes (Al-Fahad, N. F. 2008). It is interesting to study e-learning in the context under this adaptation, e-learning as a supplementary tool to in-class instruction, where more investigation is needed.

The purpose of this research was to study the learners' effectiveness and satisfaction toward e-learning and to assess whether substitution of conventional learning with e-learning can improve the education standard and knowledge of people especially in this information world.

METHODOLOGY

The study was conducted in the College of Applied Studies and Community Service, King Saud University, Riyadh, Saudi Arabia. The questionnaires were distributed to 201 students (female); only females were taken the e-learning courses in the college of Applied Studies and Community Service. Student were asked to complete an anonymous paper and pencil survey (shown in Table 1).

The survey consisted of 10 short questions. Before the survey questions were given to the students, we had made sure the student taking part in the survey has a personal computer and is involved in e-learning courses.

Respondents were asked to mark their agreement with these statements of three–point Likert type scale ranging from 1(strongly agree), to 3(strongly disagree).

Table: 1
Descriptive Statistics of Data for Student Satisfaction toward e-learning

No.	Statements	(1) Strongly agree	(2) Undecided	(3) Disagree
1	Do you have advance knowledge about e-learning?	141 (70.1)	35 (17.4)	21 (10.4)
2	Do you have an experience of e-learning?	141 (70.1)	39 (19.4)	16 (8.0)
3	Do you agree with the opinion that e-learning can enhance learning skill?	126 (62.7)	43 (21.4)	32 (15.9)
4	Do you agree that e-learning is beneficial for your learning?	147 (73.1)	30 (14.9)	24 (11.9)
5	Do you believe that e-learning can contribute to national education in Saudi Arabia?	145 (72.1)	40 (19.9)	15 (7.5)
6	Do you believe that e-learning can substitute conventional learning shortly?	110 (54.7)	58 (28.9)	33 (16.4)
7	Do you support that e-learning should be included in the national plan for education in Saudi Arabia?	140 (69.7)	37 (18.4)	24 (11.9)
8	Do you plan to study additional electronic courses in the future, if it is available?	98 (48.8)	62 (30.8)	41 (20.4)
9	I prefer that all courses that I study to be in the form of electronic courses.	91 (45.3)	43 (21.4)	67 (33.3)
10	I prefer e-learning to conventional education.	104 (51.7)	39 (19.4)	58 (28.9)

Note: Figures in brackets indicate percentages

Respondents of the survey are undergraduate students undertaken 5- selected courses, these courses are in different areas, in specific;

- **Introduction to Islamic culture (two courses, G1),**
- **Arabic Language Skill (two courses, G2) and**
- **English (one course, G3).**

The students are at the age between 18-24 years old, every course contains approximately 30-60 students: The questionnaires were distributed and collected at the end of the semester, during January, 2009, which were then processed to statistical analysis procedures. The collected data was coded using SPSS statistical Application. Table 2, shows the descriptive statistical data.

Table: 2.
Students' Satisfaction Toward e-learning,
Mean and Standard Deviation Correlations

Statement	Overall		G1(N 80)		G2(80)		G3(41)	
	M	SD	M	SD	M	SD	M	SD
1	1.36	.69	1.37	.77	1.34	.65	1.39	.63
2	1.34	.65	1.37	.67	1.31	.65	1.34	.62
3	1.52	.76	1.60	.81	1.51	.73	1.44	.71
4	1.39	.69	1.45	.71	1.36	.70	1.32	.65
5	1.34	.62	1.39	.63	1.36	.66	1.22	.52
6	1.62	.75	1.64	.75	1.59	.77	1.63	.73
7	1.42	.70	1.44	.73	1.41	.69	1.41	.67
8	1.72	.78	1.80	.82	1.75	.79	1.49	.68
9	1.88	.88	1.95	.87	1.91	.87	1.68	.91
10	1.77	.87	1.85	.89	1.76	.86	1.63	.86
Overall G1, G2 & G3	1.81	.75						

RESULTS AND DISCUSSION

The questionnaires were distributed to 201 students (female) and collected on the last of each course during January, 2009. Respondents of the survey are college student undertaking five selected courses. These courses are in three main topics, in specific: 1- Introduction to Islamic culture (IS 101), Islam and building Society (IS 102), cumulative percent G1, (39.8%); 2- Arabic Language skill (AL 101), Arabic writing (AL 103), Cumulative percent, G2, 39.8%) and 3- English (Eng 101), cumulative percent, G3, (20.4%). The collected data were coded using Statistical Package for Social Sciences (SPSS), using Version 10.0.This section presents the results of the factor analysis. The factor analysis by principal components was adopted in the data analysis for the purpose of partitioning the experimental variables into factors that influence the student's satisfaction. Responses to each of the indicators on satisfaction toward e-learning were measured on a Linkert Scale of 1 to 3 ranging from "strong agree" to "disagree". Data in Table 1 and 2 provides an overview of the relative importance of these indicators. Mean scores of the sample indicate that more than 70% of respondents strongly support having a clear idea of the e-learning concept and did have experience with e-learning. This satisfaction data results indicate that somehow, e-learning are more flexible and enable students greater freedom of learning any place, any time.

On the subject of 'Knowledge of Learning' from the Survey, we found that 70.1% of those surveyed or 141 out of the 201 students have heard and proclaimed to have a clear idea of the e-learning concepts, while 17.4% of the remaining Students stated not sure and 10.4% of students admitted to not having an idea. Therefore, it can be concluded that e-learning is no longer something foreign or new to the community nowadays.From the 201 students who filled the survey form, 141 students or 70.1% of them said that they did have experienced with e-learning method before, while 19.4% of students stated not sure and the remaining students, 8.0% not having an idea.

When they were questioned on whether they think that e-learning system could enhance their learning skills, it is better compared to the conventional way, 62.7% or 126 students strongly agree and stated yes.

Meanwhile, 15.9%, 32 of them said no and 21.4%, 43 of them are not sure.We found that majority 73.1% of the students or 147 students agreed that e-learning system is of great benefit. 11.9% or 24 of them do not agree and 14.9% or 30 of the remaining students, stated not sure.

When students were asked to state their opinion on the possibility of e-learning making any contribution to the national education systems in Saudi Arabia growth, 72.1% or 145 students answered yes (they strongly agree). Meanwhile, 19.9% or 40 students say that they are not sure and the remaining 7.5% or 15 students do not agree.

Regarding the future of e-learning the respondents were asked if they think e-learning would one day be able to substitute the conventional way of learning in schools in the future, 54.7% or 110 students agree and 28.9% or 58 students are not sure. The remaining, 16.4% or 33 students disagree.
Therefore, from this survey we can conclude that e-learning is being more acceptable than conventional learning; this is because students agree that e-learning provides more advantages over the conventional learning method.

69.7% or 140 students supported the notion of implementing e-learning into the national plan education system, while 37 of the respondents stated not sure and 24 of the students disagree. This means that more people are viewing e-learning as more beneficial than the conventional method.

From the Survey, 48.8% or 98 students agree to take more e-learning courses in the future. Meanwhile 30.8% or 62 students are not sure and the reaming 20.4% or 41 students do not prefer to take more electronic courses in the future.

When the students were questioned if they prefer to study all courses in electronic form, 45.3% or 91 students agree and 21.4% or 43 students are not sure. Meanwhile 33.3% or 67 students disagree.

When students were asked "did they prefer's e-learning to conventional learning?; 51.7% or 104 students prefer e-learning, and think that e-learning is more interesting. Meanwhile 19.4% or 39 students are not sure. The remaining 28.9% or 58 students do not agree. According to our survey, there are 51.7% of students who agree that e-learning is mobile as students can use their PDA, notebook when they are traveling anywhere.

According to a sample survey of University of Edinburgh, "Student Views of E-Learning -Web CT user 2004", a similar question had been asked. It goes "Do students view ICT as a benefits for their study?. The Table below shows a very large majority stating that ICT is a benefit to their studies, and remarkably few seeing it as a distraction. This emphasizes the degree to which students have.

		Female	Male
A very considerable benefit.	78.9	78.4	79.4
Something of a benefit.	19.3	19.2	19.7
Something of a distraction.	1.6	2.1	0.9
A very considerable distraction.	0.2	0.3	0.0

[Depicted from a survey from University of Edinburgh Web CT users 2004, (Haywood,J.)]

This table of survey shows that e-learning has a very considerable benefit and it is not a distraction. From this table we can conclude that the existing e-learning can give more benefits to students. However, the results of this study can be explained in Table 3. It gives the results of extracted communities of all the variables. It shows the proportion of the variance of a variable by the common factors. From Table: 3, it very clear that e-learning can replace conventional learning" has the least percentage (34.5%), of variance that can be predicted or explained by other 9 variables. On the other hand, "the experience in e-learning" has the highest variation (70.1%), that can be accounted for by 9 variables. These results reveal the importance attached to the fact that "e-learning can substitute conventional learning". The communality of (70.1%) in the "the experience in e-learning" can be predicted by the usage of other variables will have corresponding effect on the new opportunities of learning.

Table: 3

Communities (Extraction Method: Principle Component Analysis

	Initial	Extraction
A1	1.000	.695
A2	1.000	.701
A3	1.000	.686
A4	1.000	.690
A5	1.000	.572
A6	1.000	.345
A7	1.000	.644
A8	1.000	.465
A9	1.000	.602
A10	1.000	.633

Another statistical analysis instrument is reliability coefficient, Cronbach's alpha (Cronbach, L. J., 1951), to estimate the scale of consistency among items in the group (Hair, J. F., et al, 1998). The Cronbach's alpha is generally acceded upon the level of 0.70, albeit it is acceptable at 0.60 in exploratory research (Cronbach, L. J., 1951). Table 4, illustrates the factors extracted from factor analysis and the Cronbach's alpha from reliability analysis of the data. Factor analysis led ten questionnaire statements into two components statement 3-10, and 1-2 form factors 1 and 2 respectively. These factors contribute to the explanation in student satisfaction variable (60.34%) of total variance.

Table: 4

Rotated Component Matrix* for Factor Analysis of the Satisfaction

	Component	
	1	2
A1		.833
A2		.832
A3	.828	
A4	.831	
A5	.755	
A6	.565	
A7	.794	
A8	.681	
A9	.768	
A10	.794	
Rotation Sum of Squared Loading		
Total (Eigen Value)	4.590	1.444
% of Variance	45.901	14.436
Cumulative %	45.901	60.336
Cronbach's alpha	.8519	

The internal consistency, represented by coefficient alpha, of all items is as much as 0.8519. It reports and existence of cohesive internal relationships of all measurements statements in representing the satisfaction of e-learning, and this result provides confidence that statistical results produced are coming from stable measurement source. The first component represents the most contributory element to student satisfaction in e-learning at a figure of 45.90% of total variance explained. Student satisfaction could be explained by the second factor (14.44%) of the total variance in this study.

E-learning is beneficial to education, corporations and to all types of learners. It is affordable, saves time, and produces measurable results. E-learning is more cost effective than traditional learning because less time and money is spent on traveling. Since e-learning can be done in any geographic location and there are no travel expenses, this type of learning is much less costly than doing learning at a traditional institute.Flexibility is a major benefit of e-learning. E-learning has the advantage of taking class anytime anywhere. Education is available when and where it is needed. E-learning can be done at the office, at home, on the road, 24 hours a day, and seven days a week. E-learning also has measurable assessments which can be created so that both the instructors and students will know what the students have learned, when that completed courses, and how they have performed.Students like e-learning because it accommodates different types of learning styles. Students have the advantage of learning at their own pace. Students can also learn through a variety of activities that apply to many different learning styles learners have. Learners can fit e-learning into their busy schedule. If they hold a job, they can still be working with e-learning. If the learner needs to do the learning at night, then this option is available. Learners can sit in their home in their pajamas and do the learning if they desire.

E-learning encourages students to peruse through information by using hyperlinks and sites on the worldwide Web. Students are able to find information relevant to their personal situations and interest. E-learning allows students to select learning materials that meet their level of knowledge, interest and what they need to know to perform more effectively in an activity.

E-learning is more focused on the learner and it is more interesting for the learner because it is information that they want to learn. E-learning is flexible and can be customized to meet the individual needs of the learners.

E-Learning helps students develop knowledge of the Internet. This knowledge will help learners throughout their careers. E-learning encourages students to take personal responsibility for their own learning. When learners succeed, it builds self-knowledge and self-confidence in them.Educators and corporations really benefit from e-learning. Learners enjoy having the opportunity to learn at their won space, on their own time, and have it less costly.

Next we look at the disadvantages of e-learning. One disadvantage of e-learning is that learners need to have access to a computer as well as the Internet. They also need to have computer skills with programs such as word processing, Internet brewers, and e-mail. Without these skills and software it is not possible for the student to succeed in e-learning. E-learning needs to be very comfortable using a computer. Slow Internet connections or older computers may make accessing course materials difficult. This may cause the learners to get frustrated and give up. Another disadvantage of e-learning is managing computer files and online learning software. For learners with beginner-level computer skills, it can sometimes seem complex to keep their computer files organized. Without good computer organizational skills, learners may lose or misplace reports causing them to be late in submitting assignments. Some of the students also may have trouble installing software that is required for the class.

E-learning also requires just as much time for attending class and completing assignments as any traditional classroom course. This means that students have to be highly motivated and responsible because all the work they do is on their own. Learners with low motivation or bad study habits may fall behind. Another disadvantage of e-learning is that without the routine structures of a traditional class, students may get lost or confused about course activities and deadlines causing the students to fail or do poorly.Another disadvantage of e-learning is that students may feel isolated from the instructor. Instructions are not always available to help the learner so learners need to have discipline to work independently without the instructor's assistance. E-learners also need to have good writing and communication skills. When instructors and other learners aren't meeting face-to-face, it is possible to misinterpret what was meant.

For the overall conclusion, the existing of e-learning is really good to improve current education culture, but it is still lacking some features to substitute conventional learning. It will be a problem for our society if the students graduate from schools and universities lacking in communication techniques and most important of all being humane, and producing uneducated experts in the future.

Imagine if the future of our education is fully based on e-Learning, what would be the of our society? No doubt, because of the rapid advancement of our technology, e-Learning will gain more acceptance case from the public.

CONCLUSION

College of Applied Studies and Community service students' satisfaction is seriously taken into regard. Students are regularly asked to evaluate e-learning courses, the faculty, the appropriateness of technologies, and the support services provided by the institutions. Results in terms of student satisfaction help to analyze the achievement of course objectives skills, knowledge or competencies. Such results can also been seen as an expression of a general sense of customer satisfaction, which is key in continuing learning.

While the researcher in this study expected to hear some negative voices, student comments were high positive, indicating their high satisfaction with overall learning experience. Participants were highly satisfied with the opportunity to interact with distance learning context, which can be a viable option to increase student satisfaction. The importance of this study is that is focused on students' voices regarding their experiences and perceptions toward e-learning.

It is important to note that distance education will continue to have an impact on teaching and learning. However, online environments cannot be effective and thrive without considering students' needs and preferences. Online learning environments should be carefully design to maximize students' satisfaction with these environments.

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