

FACTOR EFFECTING LEARNER'S SATISFACTION TOWARDS E-LEARNING: A CONCEPTUAL FRAMEWORK

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Abstract: The technology has embraced the innovative learning methodologies. New interactive media is in use now for delivering educational information. E-Learning has taken the place of traditional face-to-face educational environment. E-Learning is the learning style empowered by digital technology. Though, this new learning paradigm is very attractive approach for both learners and instructor; the growth of web-based learning media is very low. The main beneficiary of any educational environment is the learner. The satisfaction of the learner is inevitable for successful implementation of web-based educational environment. This paper is showing the factors which are playing influential role towards student web-base learning satisfaction. The student and instructor attitude towards technology, their computer efficacy, and instructor response, friendly interface of the online learning environment and proper facilitation of technical matters are the factors that influence student satisfaction towards online education. Administration is suggested to consider these factors for successful virtual education implementation.

Keywords: E-Learning, Student Satisfaction, Key Factors

I. INTRODUCTION

The use of information technology in current era is considered as a solution for multinational organizations or educational institutions' for their expense and quality issues. The new technology has transformed the learning and instructing method in universities. The concept of Electronic learning (E-L) has changed the student's learning and teacher's instructing methods. This is the information age and E-L has emerged as a new interactive learning environment. The efforts in the field of E-L are receiving colossal interest around the globe.

The concept of E-L is not a new thing; it has been in use for decades. The development of E-L technology is the most momentous evolvement of information and communication technologies (ICT) (Wang,

2003). Due to the tremendous growth in ICT, E-L is growing as a new pattern to deliver information in the educational area. The term E-L referred to the learning methodology using any electronic media. There are so many synonymous of E-L like open-courseware, web-based learning, e-education, open-learning, virtual education. Internet is the main source of implementing virtual education in any setup. E-L can be of asynchronous type in which student don't need to attend any classes and follow any restricted time for attending classes. The other type is synchronous in which students have to attend online sessions on particular time (Davoud, 2006).

There are so many tools used in E-L system like audio and video broadcasting, interactive TV for delivering lectures or data are copied on CD-ROM for student's facility. The web-based learning, online education, virtual learning environment, computer mediated learning are the famous synonymous of E-L (Khan, 2001). The ease of interaction with instructor to teacher or learner to learner is the most signification advantage of E-L technology (Pei-Chen, Ray, Glenn, Yueh-Yang and Dowming, 2006).

Most of the higher education universities are offering there courses using online education paradigm. The major example is MIT which is offering online several courses. Though, E-L is a very attractive approach for delivering education in online environment. The growth rate of E-L educational environment is 35.6% with lot of failure cases (Arbaugh & Duray, 2002). The main factor of E-L implementation failure is the student's satisfaction. There are so many factors that are affecting student's satisfaction towards E-L. The main factors are students, instructor, interface of E-L environment and technical assistance. The student itself is the main factor, his attitude towards E-L and interaction with other students. Without teacher timely response student will not feel comfortable in online environment and it majorly depends on teacher attitude towards E-L. Friendly and easy of to use interface for online

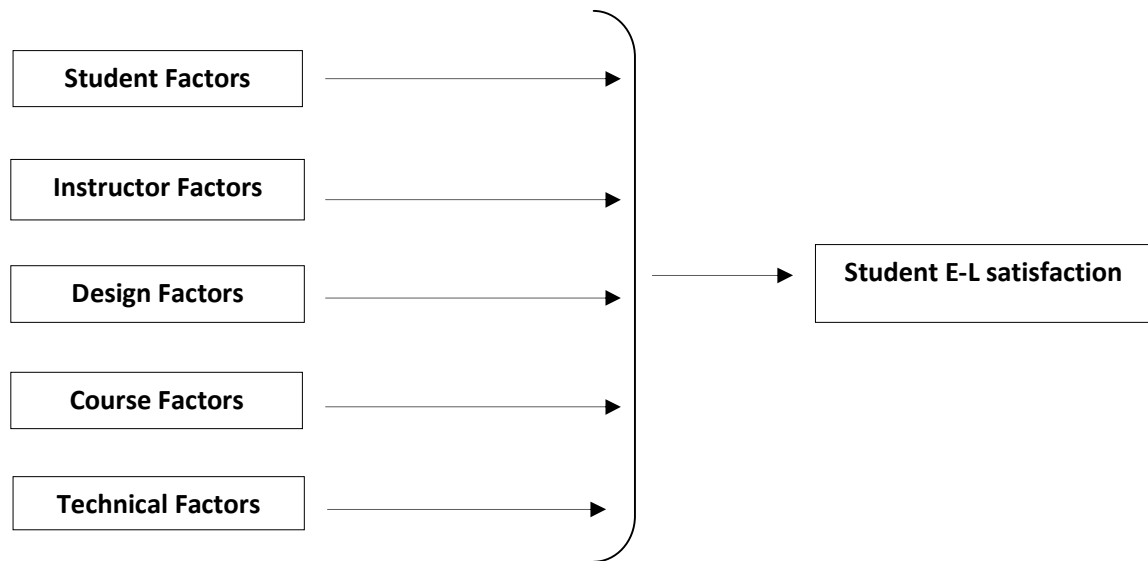


Fig.1 Legend

education is very important for students. They feel good and relaxing in learning with new tools and method. Students of higher education are more interested in quality of course content. They need more information compared to traditional learning environment. Technical flaws in online learning interface leads towards student anxiety. They feel reluctant in taking online lectures next time. These factors affect student satisfaction towards E-L and directly associated to the growth of E-L implementation. Administration should consider these factors in order to implement E-L successfully.

The paper flaunt the aspects that are playing a key role towards students satisfaction upon E-L or online mode of education. Author is explaining the factors from student perspective that is leading towards student's satisfaction in online education.

This paper will add significant information in body of student satisfaction literature. Considering the key factors (students, instructors, interface, content, technology) before E-L implementation in any higher education university will leads towards successful E-L implementation. Administration must consider these factors to avoid failure and implementation loss. This paper will show the factors from Asian perspective and should be used by administration for successful implementation.

II. THEORETICAL FRAMEWORK

The need of exploring the factors that are important for the successful growth of organization was considered in 1980s. It was the era when firstly the significance of influencing factors was considered by the organizations and included in the body of literature. Organizations were keen to know about

key areas which can be enhanced and will provide competitive achievement comparing with other organizations. (Ingram, Biermann, Cannon, Neil, & Waddle, 2000). Freund had explained the critical success factor in one brief statement in 1988, "*those things that must be done if a company is to be successful*". Papp had worked in the field of distance learning in 2000, he had explained many factors that are important for the successful acceptance of E-L. The attributes like course content, delivery style, administrative support, effective technical support, interface, student's and teacher's computer efficacy are the areas which need proper attention. These factors are important from every aspect; teacher, student and administrative side.

Student Factors

The first factor is the student himself. Satisfaction of student from E-L or online education is based on the student's attitude towards information and communication technologies (Arbaugh, 2002; Hong, 2002).

If the student has positive perspective about E-L then he would definitely participate in online course environment effectively. E-L need the student proficiency in computers, the results will be very effective when student shows positive attitude towards computer.

Proposition 1a. Student satisfaction is positively influenced by student's attitude towards E-L and their computer efficacy.

Satisfaction of student towards E-L is very much influenced from the computer anxiety (Piccoli, Ahmad, & Ives, 2001). In E-L environment computer

is the main part and the student who feel reluctant in using computer and feel anxiety will definitely negatively influence student satisfaction.

Proposition 1b. Satisfaction of student will be negatively influenced by student computer anxiety.

Instructor Factors

The instructor is the second factor that is contributing towards student satisfaction of E-L. The successful implementation of online education is purely based on the teacher's attitude towards E-L. Attitude towards Information and communication technologies is not the only factor which is influencing successful E-L implementation. It's the teacher who plays a vital role, his way of instruction catch the student attention towards course and readings (Collis, 1995) and (Willis, 1994). Mostly Student satisfaction and acceptance of online education is influenced by the teacher's teaching style, his attitude towards delivering lectures in friendly manner, and providing quality content (Webster and Hackley 1997).

Proposition 2a. Student satisfaction will increase if he receives positive timely response from instructor.

In a study by Volery and Lord (2000) have shown that instructor friendly behavior with students, understandability of student problems, proper understanding of IT, persuasion of interaction between students are the factors that leads towards students satisfaction.

Proposition 2b. Student satisfaction is positively influenced by instructor's attitude towards E-L.

Course Factors

Course attributes are the third factor affecting student satisfaction. E-L has removed the barrier of physical class attendance. The most attractive feature of E-L according to student and teacher both is its flexibility of location and time. Commuting was the main problem for students in traditional classes. E-L come with new virtual (anywhere, anytime, anyplace) class concept (Arbaugh, 2000). This is more attractive for the people who are on job and want to continue there education (Arbaugh & Duray, 2002). The flexible nature of online learning environment increase learner satisfaction.

Proposition 3a. Student's satisfaction is positively influenced by E-L course flexibility.

When considering implementation of any new environment, the level of quality comes first. Quality of course content is the most important attribute that leads towards student satisfaction and successful implementation of E-L. (Piccoli et al., 2001).

Proposition 3b. Student's satisfaction will rise if they learn from quality course contents with high quality.

Technical Factors

At fourth stage technical attributes affect student satisfaction. Learning via internet involves many other tools like video conferencing, audio and text based chat. To achieve successful implementation and student satisfaction towards E-L, quality of technological attributes need to be very excellent (Webster & Hackley, 1997). The usage of web-based tool depends totally on high speed internet. The network transmission speed of web-data from host server effects the learner satisfaction. The loading speed of web-data is directly connected with the host server. The more will be the best quality server more will be the loading speed of online interface. When students don't face any login and logout problem, with continue interaction with teacher their satisfaction will be improved.

Proposition 4. Better quality of internet, proper availability of technical assistance and quality of online program positively influence students' satisfaction towards E-L.

Design Factors

The fifth attribute is the design or interface attributes. Interface of the E-L system significantly influence students satisfaction towards E-L. Students adoption of E-L system is influenced by the perceived usefulness and perceived ease of use. The user friendly interface of the online course will effect student satisfaction. The easy going interface of online course will attract the student to take class via internet, when he has the time and place flexibility. The student's positive attitude towards interface of the online environment will automatically increase the chances of taking classes via internet in future. The result of user friendly interface will directly influence student satisfaction towards E-Learning.

Proposition 5. Design and interface of E-L system, perceived usefulness and perceived ease of use will add a positive response by student.

III. CONCLUSION

The technology advancement has changed the learning methodologies throughout the world. Learning style of student and teacher's teaching methodology is continuously changing. Taking information from web-based media in the form of online manuals and interactive tutorials is very attractive approach for learners. Students prefer to learn from online media instead of taking classes in any physical environment.

Though, taking lectures in online environment is very attractive approach but still growth of E-Learning

environment is very low. This paper has shown the factors which are the main barriers of E-Learning growth. The beneficiary of E-L technology are the students, if they are not satisfied then the chances of successful implementation of E-L environment is not possible. Student, teacher and technological factors are the main points that lead towards student satisfaction. If these factors are positively entertained then satisfaction will increase otherwise, it leads to student disappointment. Student himself plays a key role in his attitude or satisfaction towards E-L. Learner positive attitude towards new technology will positively enhance his satisfaction. Computer efficacy is the skill that is very important for taking classes in online environment. Knowledge of using computers significantly effect learner satisfaction. When student feel anxiety in using computer then it negatively affect their satisfaction.

The teacher role is also very important in E-L environment. Student seeks from teacher and their timely response positively influences student satisfaction. The group interactions initiated by teachers are very effective and students enjoy the learning environment. Teacher attitude towards technology is very important, their reluctance in uploading course material, taking online classes effect learner satisfaction.

The time constraint is the main limitation of this paper. This paper can be tested empirically in any western or eastern environment. The cultural factor can also be added as moderating variable for future study.

The interface of the environment and technical assistance provided by the administration are the factors which attract the student towards taking online classes. For successful implementation of E-L environment keen consideration by administration is very important. If these factors are positively entertained then growth rate of online education will increase in coming decade.

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