

Growth, Opportunities and Challenges of E Learning Model in Higher Education and Professional Certification

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Abstract

The currently available database on scholastic pursuits is both outdated and inadequate. Incomplete coverage, excessive gaps, etc., plague the gathering and sharing of educational data. More and more schools and students are taking advantage of the exciting new possibilities made possible by the rise of e-learning as a direct result of the current environmental shift. Through reviewing a wide range of studies, theses, research, and papers published by a variety of writers in India and elsewhere, the researcher here is making an effort to glean any and all relevant information for the study. Literature can help guide the formation of research questions. Both primary and secondary sources of information are considered during the discovery process. In order to derive the research of e-learning platforms in pedagogy and professional certifications, secondary data should be gathered from many websites. Primary sources include both educators (professors and teachers) and learners (students). The material was examined and hence the following findings were produced from the study. Today's e-learning approaches in higher education can be traced back to the original remote learning techniques. There are numerous causes for the expansion of the upper education and professional certification courses of e-learning industry, both from the institutions' and students' viewpoints. The researcher hopes to achieve all of the study's aims and learn as much as possible about the topic by analysing the data gathered.

Keywords: Higher Education, E-Learning and Professional Certification

INTRODUCTION

Many things have changed as a result of the development of various technologies, and this includes the demand for such technologies in the field of education. These technological advancements have altered traditional instructional practices. Tarus, et. al, (2015). Leaders throughout the world have begun investing in information and communication technology (ICT) to improve classroom instruction because they recognize the value of technical progress in education. Huge sums were spent on R&D for new technologies, yet research suggests that just a minority of schools are using these innovations (Leidner & Jarvenpaa, 1995). In order to achieve a common goal, the learner and the instructor must engage in a back-and-forth dialogue. To learn is to undergo mental and emotional transformation. In other terms, learning is the process of actively pursuing improvement in some aspect of life (Biesta, et. al., 2011).

Learning is observable and leads to modifications in behavior after exposure to instruction, mentorship, or research. E-learning has emerged as an important factor in expanding students' access to information and opening up new avenues of study. The developed world will set the standard for how e-learning is used, given this is an activity that originated in the developed world (Zhang & Nunamaker, 2003). However, implementing such technologies varies greatly depending on location. It's possible that factors won't be the same as in developed nations. Cross first claimed to have coined the phrase e-Learning in 1998 (Cross, etl, al., 2002). The term "e-learning" refers to the process of acquiring knowledge through the use of electronic media. Any learning that depends on or is enhanced by electronic communication using the latest information and communication technologies (ICT)" is how the E-Content Report (2004) defines e-learning. Due to its potential to provide rapid education at reduced costs, expanded access to education, and a willingness to bear responsibility

for all learners along the learning path, e-learning has the potential to fully replace the traditional method of education. It's a convenient tool for expanding training and other vital material to various campuses or offices (Hanna, 1998).

Employees and students benefit from this arrangement since they may complete the training at their own pace and in the comfort of their own homes or classrooms. Fifty years ago, workers used the same standards throughout their careers. Businesses could benefit greatly from investing merely in basic training for new hires (Lapitan et, al., 2021). However, as time goes on, both companies and employees abandon the old ways of doing things. They should have improved their knowledge and abilities in light of the shifting context and developing technologies. Companies are increasingly turning to online training programs in light of the adage that "one should never stop themselves from learning". Because educational institutions have embraced this modern technology, it is being used to advance innovative teaching practices (Siritongthaworn & Krairit, 2004). The E-Learning approach is now employed all around the world thanks to the Internet. The term "e-learning" has evolved to "e-learning 2.0." E-Learning 2.0 describes how this method of education has adapted to take advantage of recently developed technologies. From the point of view of e-Learning 2.0, traditional e-learning systems relied on having content sent to students over the Internet (Sigala, 2007).

LITERATURE REVIEW

Simsek, & Simsek, (2013) mentioned that, world has changed drastically from old life to today's technological world. Similarly, learning has also changed from the standard classroom to distance learning and now to online learning, where students learn in "invisible classrooms". With the advancement of technology and therefore the Internet, the planet has become an enormous storehouse of knowledge, and learning isn't any longer limited by distance, location, or physical existence. Barriers to global learning still fall (Tham & Werner, 2005). With technological changes, educational institutions must keep up in providing the best learning environment to satisfy changing demands. Information technology has created a bridge, in order that many of us who want to be told can now become "Invisible" students (Smith, & Lucena, 2016). During this manuscript, we review the utilization of electronic learning in educational activity. We first discuss design and delivery issues. Next, we offer a framework to debate critical institutional, technological, and student issues that has to be addressed for effective online learning to require place. Third, we cope with issues concerning the evaluation of online courses. Finally, we address important additional constraints that may limit the effectiveness of online learning.

The study done by Ellis, et., al (2009) explores how e-learning is considered to support the face-to-face experience of students at university. As per higher education funding council of England, e-learning is defined as information and communication technologies want to support students to improve their learning. Students studying Government Foreign and programme in their business degree experienced tutorials and lectures as a part of their weekly schedule. In addition to the this, similar study was conducted by Landa, et, al., (2020) with the use of secondary data to draw a conclusion of the research. In this research various studies such as highlights on the need for having this kind of administrator factors for effective usage of teaching and learning technologies (Belaya, 2018). The explanation for these factors rotates on allowing full attention of the user to use e-learning technologies in teaching and learning process. Most of the articles identified that administrator support in relation to motivation is a variable which leverage the adoption and usage of technology (Cenamor, et. al., 2017). It was found that (n=20, 24%) of articles reviewed cover this construct in management perspectives. The work show that the incorporation of intrinsic and extrinsic motivation enhanced the actual usage of e-learning technologies (Maldonado et. al., 2009).

According to Harun (2002), the importance of e-Learning and knowledge management at the workplace can't be overemphasized. With the rapid change altogether styles of working environments, especially medical and healthcare environments, there's a relentless must rapidly train and retrain people in new technologies, products, and services found within the environment (Wiley,1993). There's also a relentless and unrelenting need for appropriate management and leveraging of the mental object in order that it's readily available and accessible to all or any stakeholders within the workplace environment. Additionally, within the medical and healthcare setting, certain other factors reinforce this need for constant refreshing, training, and retraining of it workers (Harun, 2001).

Different parameters of e-learning are considered in this literature's such as growth, opportunities, challenges, issues, perceptions, adoption of e-learning model in different institutes as well as city so to explore the new technology, benefits they get from using this technology/model (Omer et., al, 2015).

RESEARCH METHODOLOGY

There are basically two parts or phases of e- learning. In one phase e-learning is used for educational purpose and at other level it is been used for training. The educational; use is limited to secondary and higher secondary level. In the second phase it is used to provide training to the employees and to upgrade their skills. E-learning is growing at very low rate in India as compared to international market where it is been used at all levels. In India if we can be able to make e- learning as a source of learning in rural areas then it is the easiest and fastest tool to educate people. If we consider the population in India it is hard to accommodate all the people in specific university or educational area to get the education.

Online e-Learning is an alternative to traditional face-to-face education. Many institutions will implement e-Learning to meet students' needs, especially those of non-traditional students with full time jobs. Since e-Learning is conducted using the Internet and World Wide Web, the learning environment becomes more complicated. Students' initial perceived satisfaction with technology-based e-Learning will determine whether they will use the system continually.

The objectives of the research are mentioned as under:

1. To study the old and new regime of education.
2. To study the various opportunities and growth factors of e-learning towards higher education and professional certifications.
3. To study the issues and challenges faced by learners in e-learning model.
4. To study the perception of students and teachers over e-learning.

Primary Data

The primary data is to be collected from teachers and students who are in post graduation to understand their perception of e-learning model. By conducting surveys and interviews through survey forms and calling.

Secondary Data

The secondary data is to be collected from different books, magazines, research papers, thesis, previous studies etc. from different portals where all the materials are available i.e. Google scholars, research gate and so on. In this study research preparing two separate questionnaires one for students and one for teachers. So that the research identify the result easily and there is no mix in the result.

DATA ANALYSIS AND INTERPRETATION

This Result outlines the data collection, type and contents of the questionnaire, processing of data and finally interpretation of the data. The study embraces both qualitative and quantitative research approaches. There were two sets of questionnaires which were used for collecting data from teachers and students. This questionnaire for students is prepared to identify all the objectives which are set for the research from the perspective of students. Then there is another questionnaire which is designed for teachers to identify different parameters related to study. In this questionnaire 21 questions which were exactly the same questions but have some different questions but the design of the questions is same as demographic, usage, challenges, perception, attitude, comparison between traditional and e-learning etc. all these parameters were identified by this questionnaire. This questionnaire is prepared to identify all the objectives which are set for the research from the perspective of students and teachers.

A. Result from data collected from students

TABLE 1 (Distribution of Data According to Usage of ICT, N=222)

ICT	Always	Often	Sometimes	Rarely	Never	Total
Responses	91	76	45	5	5	222
Percentage	41%	34.2%	20.3%	2.3%	2.3%	100%

Source: Compiled by researcher

TABLE 2 (Information about Their Opinion on E Learning, N=222)

	Have No Idea	Learning on your own at your own pace	Online learning	Learning by watching pre-recorded videos	Live lectures over the internet	Total
Responses	9	65	122	16	10	222
Percentage	4.1%	29.3%	55%	7.2%	4.5%	100%

Source: Compiled by researcher

After analyzing the data it is interpreted that around 41% respondent use ICT always for the purpose of learning and around 34% use it often that means more than 70% of respondents use ICT when they are study. By asking them their opinion on ICT more than 50% of respondent says that it is an online learning platform and around 29 % says it is process of learning by their own at their own pace. So comparatively it is interpreted that most of them know it is a platform which works online that with the help of internet and also it works with the speed of learner.

TABLE 3 (Information about Which Platform They Use of E-Learning)

E-Learning platforms	Coursera	Udemy	BYJU's	Google classroom	Others
Responses	122	83	41	117	47
Percentage	55%	37.4%	18.5%	52.7%	21.11%

Source: Compiled by researcher

TABLE 4 (Distribution of Data Collection about Perception, Attitude, Comparison, and Challenges of Learner on E-Learning, N=222)

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Adequate infrastructures are required for implementation of e-learning programme.	27 12.16%	29 13.06%	59 26.57%	71 31.98%	36 16.21%	222 100%
E-learning materials are extensively used in enhancing and developing skill.	19 8.5%	25 11.26%	64 28.82%	83 37.38%	31 13.96%	222 100%

It increases job related knowledge through its course content.	23 10.36%	25 11.26%	66 29.72%	80 36.03%	28 12.61%	222 100%
Contents of e-learning are designed as per the requirements of the skill relating to job than in the traditional method.	24 10.81%	25 11.26%	61 27.47%	85 38.28%	27 12.16%	222 100%

Source: Compiled by researcher

TABLE 5 Information about Usefulness of E-Learning According to Respondent, N=222)

Statement	I don't foresee any usefulness of e-learning.	Studying through e-learning mode can increase my learning effectively, as I will have easy access to learning materials (e.g. reading documents and recorded videos)	Learning electronically can improve my course performance as I will not need to travel to campus, but study at the comfort of my home.	Using e-learning system can enable me to accomplish tasks more quickly, since I will move at my own pace.
Responses	29	157	95	84
Percentage	13.1%	70.7%	42.8%	37.8%

Source: Compiled by researcher

TABLE 6 (Information of Effectiveness and Efficiency According to Respondent, N=222)

	Traditional classroom system of learning	Online platforms of learning	Both are equally effective and efficient	Total
Responses	43	43	136	222
Percentage	19.4%	19.4%	61.3%	100%

Source: Compiled by researcher

TABLE 7 (Information of Respondent on Overall Experience of E-Learning, N=222)

	Excellent	Very Good	Good	Fair	Poor	Total
Responses	18	72	114	15	2	222
Percentage	8.1%	32.6%	51.6%	6.8%	.9%	100%

Source: Compiled by researcher

In this questionnaire there are questions which belong to different category i.e. identifying their attitude, perception about e-learning and also challenges and difficulties they are facing. And also the comparison between traditional learning and e-learning that are the objectives of our research project. Asking another question belong to identify their attitude towards e-learning with the help of question which ask what they get from e-learning. Do they find out some usefulness out of it? So by analyzing the result it is interpret that around 70% respondents feel that e-learning mode can increase their learning effectiveness and around 42% says that it improve their performance and around 37% says e-learning can enable them to

accomplish tasks more quickly. Overall when taking all the questions into consideration e-learning plays a positive role in the field of higher education and professional certifications. The attitude, perception of the students towards e-learning is positive whether they are boys or girls. All of them have good experience with e-learning. And they find out e-learning is equal important as traditional learning.

B. Result from data collected from Teachers

In this second set of questionnaire which is for teachers and professors the researcher is trying to analyze the same parameter which were analyzed in previous set of questionnaire i.e. attitude and perception of teachers towards e-learning and challenges and difficulties they are facing. Also try to find out their perspective about traditional and e-learning model of study.

TABLE 8 (Distribution of Data According to the Usage of ICT in Teaching, N=79)

	Always	Often	Sometimes	Rarely	Never	Total
Responses	26	24	17	9	3	79
Percentage	32.9%	30.4%	21.5%	11.4%	3.8%	100%

Source: Compiled by researcher

TABLE 9 (Distribution of Data According to How Comfortable they were while using ICT, N=79)

	Comfortable	Somewhat comfortable	Neutral	Somewhat uncomfortable	Uncomfortable	Total
Responses	51	12	11	1	4	79
Percentage	64.6%	15.2%	13.9%	1.3%	5.1%	100%

Source: Compiled by researcher

In category the questions are based on basics of ICT so in basics the question asked is how often you use ICT in your teaching so more than 60% respondents are use ICT in their teaching which includes 32% always use ICT in their teaching and 30% often use ICT while only 3% respondents are never use ICT. After this the question asked is about how comfortable using ICT so more than 70% respondents are comfortable while using ICT and only 5% are uncomfortable.

TABLE 10 (Information about Which Technique of E-Learning they Use)

	Video conferencing	Pre-recorded lectures	Google drive and similar collaborative	Problem based learning projects	Others
Responses	47	33	27	16	4
Percentage	61%	42.9%	35.1%	20.8%	5.06%

Source: Compiled by researcher

TABLE 11 (Information of Which Platform they use in Teaching)

	Coursera	Udemy	ERP	Google classroom	LMS	YouTube	Other
Responses	17	5	17	34	11	33	14
Percentage	21.5%	6.3%	21.5%	43%	13.9%	41.8%	17.72%

Source: Compiled by researcher

TABLE 12 (Information about Difficulties and Challenges Faced by Respondent while using E-Learning)

	Technical Issues	Adaptability struggle	Computer literacy	Internet connection	Computing devices	Others
Responses	51	14	8	44	14	2
Percentage	64.6%	17.7%	10.1%	55.7%	17.7%	2.53%

Source: Compiled by researcher

TABLE 13 (Distribution of Data According to the Agreement of The Respondent,N=79)

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
E-learning is better medium for students for their studies.	5 6.33%	15 18.98%	27 34.18%	26 32.92%	6 7.59%	79 100%
E-learning provides a good platform for higher studies.	5 6.33%	12 15.20%	27 34.18%	25 31.65%	10 12.66%	79 100%
E-learning is developing skills of the students.	2 2.53%	10 12.66%	27 34.18%	27 34.18%	13 16.45%	79 100%
E-learning makes better use ICT tools than traditional method.	7 8.86%	10 12.66%	22 27.85%	31 39.24%	9 11.39%	79 100%
E-learning provides better opportunities to design better content than traditional learning	3 3.79%	17 21.52%	18 22.78%	29 36.71%	12 15.19%	79 100%

Source: Compiled by researcher

TABLE 14

Information about Benefits ripped by the Respondent while using E-Learning

	Enhancement in the quality of teaching and learning process	Meet the learning style or needs of students	Improve the efficiency and effectiveness	Improve user-accessibility and time flexibility	No benefit
Responses	42	41	40	38	5
Percentage	53.2%	51.9%	50.6%	48.1%	6.3%

Source: Compiled by researcher

TABLE 15

Information of Demerits of E-Learning According to Respondent

	No self discipline	Lack of inputs from trainers	Cheating prevention during online assessment is complicated	Instructors tends to focus on theory rather than practice	Others
Responses	52	34	51	34	3
Percentage	65.8%	43%	64.6%	43%	3.79%

Source: Compiled by researcher

In another category first question asked is challenges and difficulties faced while using e-learning platforms so most common challenges they are facing is technical issues where more than 60% respondent give their response and second common challenge they are facing is internet connection where more than 50% give their response. Overall technical issues and internet connection is the primary challenges of respondents they are facing towards e-learning. Else other issues are not so common among them i.e. adaptability, computer literacy and computing devices.

So overall considering all seven statements together more than 40% respondents are agree with the statements which includes more than 10% respondents are strongly agree with the statements and more than 35% are neutral with their response that means they are neither agree nor disagree. So their response gives a positive feedback relating to the statements. After analyzing all the questions of questionnaire together it shows that more than 70% respondents show their positive response towards e-learning model. They feel that e-learning plays a vital role in developing student's career in higher education and professional certifications.

FINDINGS AND CONCLUSIONS

The entire nation was taken into consideration when conducting this study. Analogous studies might be carried out with an emphasis on all students and educators across the nation, streamlining the understanding of e-learning and its associated benefits and limitations. To ascertain the worth of e-learning and the expanding market shares, the study findings might also be examined. This would facilitate the acquisition of the attention on multiple elements, including technology, the structures and availability of the courses, etc. In this research study, respondents were asked a variety of characteristics to determine their perceptions, attitudes, and other information on e-learning platforms. Generally speaking, the majority of respondents have a favorable opinion of online learning. This research study produced a variety of results and recommendations that will aid in the future development of an e-learning platform that is even more successful and efficient.

The global higher education landscape is constantly changing. As a result of rising prices, decreasing resources, and a growing demand for distance education, educational institutions are rethinking their approach to providing instruction. New and exciting prospects exist for both educational institutions and students as a result of the increased use of e-learning as a response to the current changing environment. As a result of these shifts, schools now have an ideal medium through which to disseminate instructional materials. The growth of the online learning business in higher education may be attributed to a number of factors that are beneficial for both the schools and the students.

1. Previous research conducted at Bolivia's UMSA university found that inadequate technology resources, such as bandwidth, present significant challenges for e-learning initiatives. Teachers may have trouble implementing a plan in which synchronous communication is maximized due to the persistent problem of inadequate bandwidth.
2. Educators who hold the view that e-learning can be useful in the classroom frequently point to their own experiences as evidence. Most of them had been using e-learning for some time and were familiar with its various advantages and disadvantages compared to more conventional forms of education. Informants who were more suspicious of e-learning in general also held the view that traditional classroom learning, in which the teacher plays a central role, is the most effective method of instruction.
3. The participating educators' levels of comfort using technology in the classroom ranged widely. Educators in general reported feeling at ease in their own use of technological tools. Regardless of the teacher contacted, all informants claimed they required additional professional training in using electronic tools for instructional objectives.
4. E-learning adoption can be impacted by a variety of human, technical, and institutional variables. The barriers to e-learning, such as the expense of implementation, the length of time required to set up and use e-learning, the infrastructure and technology required to implement e-learning, the willingness of potential users to adopt it, and so on, all play a role in determining whether or not e-learning will be widely adopted.
5. E-learning, as they see it, is a tool for improving one's employability by facilitating the acquisition of new abilities and information pertinent to one's profession. The materials it offers are more closely tailored to actual workplace needs in terms of knowledge and experience.
6. Analysis shows that most students think that proper facilities are essential for e-learning to be successfully implemented.
7. Researchers found that using e-learning to supplement traditional classroom instruction improved students' retention of material and overall academic achievement.
8. In India, most of the problems that educators encounter while attempting to use an online learning platform are technological in nature. The results indicate that the two most significant challenges they faced when using the e-learning platform were internet issues and technical concerns.

Nine of them think that online education is a great resource for pupils. E-learning helps students hone their abilities and gives instructors more leeway in crafting engaging lessons than they would have with a more conventional medium.

A survey of instructors found that nine out of ten agreed that e-learning helped their students succeed academically and improved their ability to monitor their progress.

DISCUSSIONS

In general, the reaction to e-learning has been good from both students and instructors. E-learning is the result of their responses to various conditions. The use of e-learning platforms is not without its difficulties, but there are also chances and progress that will benefit both students and instructors. Both students and teachers support e-learning because of its potential benefits to their professional development. In some cases, such as with questions about practical topics, students are evenly split between preferring traditional classroom instruction and online study. The overall conclusion reached upon data analysis is that both methodologies have their strengths and drawbacks. E-learning, made possible by cutting-edge technological advancements, is a boon to educators everywhere. While traditional values are still held by many educators and students.

E-learning is a cutting-edge technological innovation that benefits both educators and their pupils. After looking at both primary and secondary sources, we can safely say that E-Learning is a promising field with bright future ahead. It's crucial for getting into graduate school or earning professional credentials. A good, effective, and efficient method of education is being developed in response to the ever-evolving environment, with the incorporation of new courses and platforms.

SUGGESTIONS

1. E-learning is undoubtedly superior to traditional learning, but as learning necessitates human-to-human interaction, it is imperative that e-learning take this into consideration.
2. In order to improve usage and foster enthusiasm in utilizing the platform, a thorough analysis and understanding of the needs of both teachers and students are necessary before implementation.
3. The e-learning model must be more technologically advanced and successful in order to prevent the bulk of the respondents' problems from occurring in the future.
4. In the current crises, this mode of study allows professors to impart their knowledge to students, who then absorb it from the teachers. If the content is updated and more applicable, it will give students an excellent platform to acquire the skills that interest them.
5. Some educators argue that as it is challenging for them to verify descriptive responses via e-learning platforms, technology for this purpose needs to be developed.
6. Since the educational system in rural areas is less successful than in metropolitan areas, e-learning also needs to be developed to meet the needs of these places.

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