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A Study of Challenges Faced by E-Learning Faculty in Pakistan

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Abstract

In the most developing countries, e-learning was not preferred as a tool for teaching and learning process. However, the pandemic of COVID-19 forced institutions and teachers to utilize e-learning as a mode for education to continue process of teaching and learning. This study appraised university faculty members' observations, identified their experiences, and challenges of e-learning during the COVID- 19. It also explored factors which impede the acceptance and use of e-learning as a device teaching at higher education level. Data were collected using an electronic questionnaire for exploring challenges faced by e-learning faculty. It was found that 44% of the faculty members who participated in the study were assistant professors. More than 30% faculty members were from department of Computer Sciences. The significant findings of the study were that more and more training facilities for the faculty and students should be arranged on campus. Infrastructure of e-learning environment needs to be up-dated continuously and better incentives for the faulty members should be given by the employer. The research study showed that the challenges were overcome by the faculty members through the e- learning way of teaching and learning at higher education level. Thus, it would be a successful strategy for the promulgation of e-learning and utilize technology as a very positive step towards educational development and change.

Keywords: E-learning, digital learning, distance learning, Covid-19.

Introduction

E-learning may be defined as the process of learning with the support of digital electronic tools, media and gadgets (Basak et al., 2018). In the human history of teaching and learning, it has mainly been done through face to face or by listening to people with scholarship and listening to those who have read and written a lot of books and to observe them and then copying them. Due to rapid growth and development in science and technology in many areas of education, most importantly in teaching and learning, this new method of teaching and offers many advantages which consist of supporting distance and online learning.

The term e- learning is a modern one in its nature as it has been coined two decades ago (since 1999) in the fields of computer sciences and technologies devoted to teaching (Ubell, 2000). Romiszowski (2003) defines e-learning that it is a form of teaching and learning which covers on-line and off-line forms of learning and teaching focusing individual, group and

collaborative activities. E- Learning is a new idea and concept of teaching and learning for most of the faculty members. E-learning consists of all forms of electronically teaching and learning with the help of technology that involves transferring course contents and materials online electronically and digitally (Broadbent, 2002).

The information and communication technology (ICT) also serves as a specific media to implement the learning process. The form of education got its popularity due to the fact as it has a lot of un-doubtable benefits over the conventional ways of teaching and learning (Radović-Marković, 2010). The first thing is that there is no condition of face to face interaction and large number of people to gather at a place which is also a very beneficial at the times of pandemics like covid-19 as we have experienced it. It is also beneficial for large scale organizations with different branches geographically.

The usage of e-learning technology also reduces the cost of courses, making and arranging classrooms, a huge amount of staff salaries, travel costs, utilities etc. The organizations which have promulgated e- learning exhibits that the total amount of training is drastically reduced (Klein, Ware, 2003). The other advantage of e-learning is that there are opportunities for the people to study conveniently at their own preferred time and place.

Whereas with traditional forms of teaching and learning some learners are not able to attend the classes due to some work, assignments; it is very important and for a successful and better performance. This provides institutional challenges that are why organizations are preferring and implementing e-learning which generally face to face learning lacks.

In addition to it, it is worth mentioning to note here that the process of e- learning may be continuous. That means if there are new courses being offered or new training material available, the employees take the course without waiting for new class mates or new group formation as it is in face-to-face classes (Ruiz, 2006). Thus, it is worth mentioning here that effectiveness of e-learning forms for teaching a wide range of knowledge and skills. Every person has its own learning way and style that characterizes a system of perceiving and understanding its own learning with the available educational material. There are certain people who have the capacity of perceiving educational material in the classroom setting. However, researches show that at least 80% of the learners can effectively perceive learning material in any form or in any mode of teaching. This is evident that majority of learners are capable to learn effectively in electronic format of teaching and learning.

The development in science and technology and ICT has paved the way for institutions to participate in online social networks to e-learning using LMS and web 2.0. These are new tools of learning by using ICT, which are flexible and able to customize. For example, LMS is used for delivering, tracking and managing education, used for focusing teaching and learning. It manages and deals with a range of educational records to software for the effective distribution of different courses on the internet. A learning content management system (LCMS) is on the other hand, software which focuses on the content of authoring (content objective which can be reusable and curriculum).

Technology is playing its important role now-a-days to tackle with the COVID-19 health crisis and learning at the same time. The sudden situation to do work at a distance, home learning, home schooling and a great increase in online learning and distance work increased the demand of e-learning. Few of these changes will remain in use and continue beyond this pandemic (Antipova, 2021). The one main trend of 2020 in education was an urge requirement for the implementation of all the major aspects of distance learning (Radha et al., 2020).

The crisis of pandemic covid-19 has caused an enormous shock in the history of world educational systems. It has also changed the lives of billions of school going children throughout the world. The closures of educational institutions and schools affected 94% of the educated population throughout the world and people involved in it got affected enormously.

One problem in applying LMS in any educational institution involves in making changes in the working process which is different than conventional teaching in the way of planning, designing of curriculum and in the execution of courses that require the usage of technology by the faculty member (Collis & Van der Wende, 2002). It also suggests that few faculty members may be lacking motivational elements in their personality, skills to complete the tasks by adopting new tools and techniques even if there are benefits to the institution, staff and students (Collis & Van der Wende, 2002). The little usage of LMS by the faculty members also prove a challenge to some of the faculty members.

However, in 2020 the educational institutions encountered the issue of rapid and effective reorganization of the entire system and process of teaching and learning. Many educational institutes were reluctant to switch over from conventional pedagogical approach to online teaching and learning (Dhawan, 2020). This was a basic requirement for the proper functioning of the education system. It is worth mentioning here that the drawbacks of e-learning include technical components like internet, computer skills and the availability of equipment (Aung, Khaing, 2015).

Traditionally, the faculty members are personally held accountable and responsible for their lectures' planning and execution of course materials but here the institutions are required to have the direct participation and involvement by the external course developers. A good incentive should be offered to buy and set up new technology and the provision of support for new infrastructure and set up. The faculty is required to lead time to learn new technological and computer skills to boost up their motivation and undertake important work and start using new tools even if there is benefit for the organization.

There is great need to change institutional ethos and benefits to the faculty members for their efforts to enhance teaching and learning which will definitely be of beneficial for the institutions financially. This may also include the training and retraining of faculty members to utilize and enhance their IT skills to ensure that e-learning infrastructure of the institute is equipped with skilled and trained staff.

Objectives of the study

The objectives of the study were to:

1. explore the challenges faced by e-learning faculty members
2. find out remedies of the challenges faced by e- learning faculty members
3. explore improvements in teaching by e-learning faculty members

Research questions

The following research questions were designed by keeping in view the objectives of the study:

1. What are the challenges faced by e-learning faculty members?
2. What are remedies of the challenges faced by e- learning faculty members?
3. Which improvements have been achieved by e –learning faculty members?

Methodology

The aim of the study was to find out challenges faced by e-learning faculty members in Pakistan during COVID-19 pandemic and suggest remedies for the future e-leaners and teachers. The study was completed after getting responses which were collected through an online survey

distributed via Google forms through social media like Facebook, WhatsApp and by emails from different faculty members working in different departments in public and private universities of Pakistan. The sample comprised 165 respondents (male75 and female 90).

Most of the faculty members were not having experience of teaching online or through e-learning. It is also important to mention here that only teaching was done through online classes whereas the examinations were managed by face to face in the institutions' premises.

Procedures of data collection

A questionnaire was designed on Google forms and an invitation link was shared with the respondents via email and on social media such as WhatsApp, Facebook. Reminders for the response were also sent after ten days. A covering letter explaining the purpose of the research study, importance and significance of the study was also shared so as to encourage the cooperation in the study by the respondents.

Pilot study

Pilot study was done on 10 faculty members teaching e-learning classes. The modification, changes and corrections were done to make sure the clarification of all the questions. A reliability test was also done for testing the reliability of the questionnaire.

Data Management

The collected data were analyzed by using SPSS (Statistical Package for Social Sciences) version 20.0.

Data Analysis

Table: 1 Gender wise Distribution

		Frequency	Percent
	Male	75	45.5
	Female	90	54.5
	Total	165	100.0

Table 1 shows that in total 165 faculty members (90 female and 75 male) participated in this research study.

	Frequency	Percent
Lecturer	44	26.7
Assistant Professor	74	44.8

Associate Professor	32	19.4
Professor	15	9.1
Total	165	100.0

Table 2 depicts that the majority of the faculty members were assistant professors who participated in this study.

Table: 3 Departments

	Frequency	**Percent**
Education	35	21.2
English	34	20.6
Computer Science	50	30.3
Business_ Administration	31	18.8
Biology	15	9.1
Total	165	100.0

Table 3 shows that majority of faculty members who participated in the study were from Computer Science department and the faculty members from department of Biology were least in number.

Table: 4 Experience

Experience in Years	**Frequency**	**Percent**
0-5	50	30.3
6-10	49	29.7
11-15	31	18.8
16-20	35	21.2
Total	165	100.0

The table 4 expresses that the faculty members who participated in this research study were having 5 years or less teaching experience.

Table: 5 Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Gender	165	1.00	2.00	1.5455	.49945
Designation	165	1.00	4.00	2.1091	.90404
Department	165	1.00	7.00	3.4121	1.84783
Years of experience	165	1.00	4.00	2.3091	1.11868
Lack of training	165	2.00	5.00	4.0606	1.15662
Lack of technical support	165	2.00	5.00	4.2303	1.14564
Lack of infrastructure	165	2.00	5.00	4.5394	.89372
Freedom of speech	165	2.00	5.00	4.1758	1.19425
Difficult to create natural environment	165	2.00	5.00	3.5212	1.20764
Financial packages	165	2.00	5.00	2.9333	1.17460
More training	165	2.00	5.00	3.2000	1.17494
Separate sessions	165	2.00	5.00	4.5394	.89372
Regular maintenance	165	2.00	5.00	3.9091	1.38290
Students should have	165	2.00	5.00	3.9091	1.38290
Work load of faculty	165	2.00	5.00	3.7636	1.18368
English language courses	165	2.00	5.00	2.9333	1.17460
Orientation of new faculty	165	2.00	5.00	4.1697	1.17714
Faculty suggestions	165	2.00	5.00	2.7333	1.20027
Online resources	165	2.00	5.00	3.3333	1.34950

Table 5 shows the descriptive statistics in details and the responses of the faculty members with mean and standard deviation respectively.

Objective 1.

Table: 6 Descriptive Statistics

Statement	N	Mean	Std. Deviation
Lack of training facilities by the employer	165	4.0606	1.15662
Lack of technical support by the employer	165	4.2303	1.14564
Lack of infrastructure	165	4.5394	.89372
Freedom of speech during the lectures	165	4.1758	1.19425
Difficult to create natural environment during lecture	165	3.5212	1.20764

The table 6 depicts objective wise analysis of each statement with the mean and S.D of each statement.

Objective 2.

Table: 7 Descriptive Statistics

Statement	N	Mean	Std. Deviation
Financial packages of e- learning faculty should be improved	165	2.9333	1.17460
More training related to ICT should be given to e-learning faculty	165	3.2000	1.17494
Separate training sessions should be for students and teachers	165	4.5394	.89372
Regular maintenance of technical equipment required	165	3.9091	1.38290
Students should have access to e-learning faculty by email	165	3.9091	1.38290

The table 7 depicts second objective and analysis of each statement with the mean and S.D of each statement.

Objective: 3

Table: 8 Descriptive Statistics

Statement	N	Mean	Std. Deviation
Work load of faculty should be minimized	165	3.7636	1.18368
English language courses should be arranged for the e- learning faculty	165	2.9333	1.17460
Orientation of new faculty should be about e-learning	165	4.1697	1.17714
Faculty feedback should be taken at the end of each course	165	2.7333	1.20027
Online resources should be available for e- learning faculty	165	3.3333	1.34950

The table 8 depicts third objective analysis of each statement with the mean and S.D of each statement.

Conclusion

There are challenges of e-learning and future prospects for educational systems which wish to adopt teaching and learning in this way. The educational institutions should prepare themselves adopting such new trends in teaching and learning because of the spread of pandemics like COVID-19 we experienced in the recent past. The goal of this article was also to focus on the challenges faced by e-learning faculty members to share their practical experiences and problems which they experienced in e-learning at the time of COVID-19 and later on also.

So, in that context we focused on the important challenges and perceptions of e-learning faculty members. It is worth mentioning here that that the rapid transition to e-learning was a dire need of the hour and an urgent measure by the educational institutes. All the educational institutes were not ready for this radical changeover neither infrastructure was readily available nor the faculty members. Students were also not ready to face such a vast transition in the field of education.

Therefore. to enhance the usage of LMS (Learning Management System), users with less experience are required education, ICT (Information and communication technology) training and most importantly motivation. Whereas faculty members are of the view that the utilization of LMS should be increased in the future therefore this view did not support the view that faculty members are reluctant to use technology in teaching.

To get maximum benefits which LMS may provide in addition to lectures accessible and timesaving, it is important for the educational institutions to adopt measures for planning, training and provision of resources. LMS is a technology which entails learning until the usage and handling of the whole system of teaching and learning becomes a segment of regular part of every faculty member teaching technique. It will be convenient for the faculty members to teach,

plan and interact with the learners by using technology in teaching.

However, during the utilization of technology in teaching process, the faculty members got improvement in the quality of online learning tools. We may conclude that Pakistani educational system coped with the challenges and sustained its educational progression uninterruptedly in line with the timetable. The setup changed but not its excellence. Furthermore, betterment has become a part of daily work of faculty members' work.

The major drawback of this work is that we exercised it 'inside the situation of COVID-19'. Definitely, we require more time and planning to judge e-learning during COVID times in more serious way. The quantitative data analysis will enhance our understanding of a greater domain. It is recommended that all the educational institutions should make an appraisal of the evolving role of their faculty members as a result of e-learning and make sure that they possess adequate training and support to make them able to realize their full capabilities.

Ethical Considerations

The privacy and confidentiality were assured to the respondents during the online survey and data collection.

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