Implementation of Information and Communication Technology (ICT) in Distance Education in Pakistan

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Abstract

Information and Communication Technology (ICT) is the basic source of new knowledge and information. It diversified all the branches of knowledge. It is changing the scene of education drastically from formal method to distance education. Distance education is getting popularize in the contemporary age. The objectives of the study were, to explore the steps regarding training of learners to use ICT, to analyze the use of ICT by learners and to get suggestions to implement ICT in distance education in Pakistan. The researchers used qualitative research design for the study. Population of the study was all the students of M. Phil in Virtual University, Pakistan. Convenient sampling technique was used for the selection of sample for the study. Interview sheet was used to collect data from the respondents. The study found that no basic training was provided to the learners about application and implementation of ICT. Learners were not able to use ICT gadgets appropriately. The conclusion of the study recommended that learners must be trained and forced to use ICT to get better results in their educational career.

Keywords: ICT, Distance Education, Implementation.

Introduction

ICT seeks for new knowledge and information. It diversified all the branches of knowledge. It is changing the scene of education drastically from formal method to distance education. Distance education is getting popularize in the contemporary age. It is used to facilitate the people in getting education in a minimum time with maximum output. As Wright, Dhanarajan, & Reju, (2009) argued that it seemed to be a foolish like question to ask about the importance of the internet. The facility of internet enables the learners to connect globally with the erudite personalities and communities to share knowledge.

Academic use of ICT influenced the curricular and co-curricular activities at large. The educationists and teachers are designing different activities and the way those activities are being conducted (Salamat, Ahmad, Bakht, & Saifi, 2018) in the classroom. It is observed that continuous and steady changes and

development in the use of ICT gadgets improved according to the requirement of the market. It also increases access as well as the competence of teachers and learners in the learning process at educational institution (Lwoga & Komba, 2015).

Eurydice (2011) gave detail about the way how ICT had helped experts of education to overcome the barriers related to education and delivery of education. Educational institutions have lack of physical and infrastructural facilities, low or not specified budget for modern technologies and failure to implement pedagogical instructions necessary to implement curriculum are most common barriers. These barriers can be due to the failure of the government or other stake holder's failure to build physical class room for effect delivery of education by e-learning mode. In the world of science and technology, importance of e-learning is in progress day by day and is broaden from primary education to higher education (Saifi, 2016).

Higher education commission (HEC) has a positive contribution in the implementation of e-learning in Pakistan in spite of aforementioned barriers. Efforts may be differ from one HEI to other, but they are trying their best While Tyechia (2014) argues that the e-learning is the fastest growing sector in the developed countries, many developing countries (including Pakistan) are striving to implement e-learning in HEIs.

It is seen that commonly regarded and recommended learning method for group of peoples is learning through web or by used tools of e-learning. By the time, methods and models of e-learning system are reviewed. Different researchers told that e-learning and its adaptation in material and resources may provide a substitute method or way of learning that is effective as compared to traditional classroom learning (Debevc, Povalej, Verlic, & Stjepanovic, 2007).

Background of the Study

To get specific results, institutions are implementing modern gadgets of ICT. When we talk about the field of modern technologies, implementation is taken as the realization of a technical instrument, software components, or other computer supported system through computer programming and placement. We can talk about web browsers that have to use (WWW) World Wide Web for specifications in all web searches (Völter, Stahl, Bettin, Haase, & Helsen, 2013).

The study is an attempt to check the implementation of ICT in distance education in Pakistan. Due to special needs, distance learners are quite different from the learners of formal education system. They have separation from their institution, fellows and from teachers also. That's why; they need use of ICT badly. According to (www.edu-links.org), USAID sticks some ideologies in order to design and implement ICT in the system of education. Those are as under:

Achieving Educational and Developmental Goals by ICT

In order to achieve educational and goals, ICT is used as it is much important to pinpoint the areas those have much importance. For the purpose, comprehensively designed technology and technology resources are necessary. ICT is helpful in connecting students to different data bases and e-libraries, in enhancing the practice of students and teachers, to improve interaction between teachers and students etc.

Enhancing Knowledge and Skills of Students by ICT

A broad body of knowledge is important to enhance knowledge and skills. In the modern age of science and technology, knowledge is spreading on daily basis. So, it is very difficult for any institute to hold updated information about any area of study. ICT provide solution to this problem as it can provide updated knowledge and information on daily basis. Institutions can improve learning experience of their students in order to enhance knowledge and skills of their students.

Supporting Decisions Making of Data-Driven by ICT

Data-driven is much important in order to plan policies, related to finance, facilities of school and decision making of the resources and services related to student support.

Teacher Training, Development and Support

The most important and complex component of ICT is the training of In-service teachers. Teacher plays an important and central role in the learning outcomes of students. So, focus must be on the training, development and support of teachers to provide maximum benefits to students.

In Pakistan, massive masses are using ICT gadgets for their ease. Review of related literature informs us regarding the productive use of ICT among common people and professionals. It is observed that majority of the masses who used ICT gadgets; they are wasting their time in some type of amusement. In academic circles people are the beneficiaries of ICT to a great extent. Especially the people who are getting education in distance mode, they must competent and skillful in the use of ICT. So, the present study will explore the implementation of ICT in distance education in Pakistan. The research objective of the study is to explore the training sessions regarding learners' ICT use and facilities in the Virtual University of Pakistan.

Objectives of the Study

Following objectives were the base of the Interview:

1. To explore the steps regarding training of learners to use ICT
2. To analyze the use of ICT by learners.
3. To get suggestions to implement ICT in distance education in Pakistan

Material and Methods

The current study was design to explore the implementation of information communication technology in distance education in Pakistan. So, researchers used qualitative method to explore the current status of ICT and to get suggestions to implement ICT in distance education in Pakistan. The population of the study comprised of all M.Phil students from Virtual University of Pakistan. Convenient sampling technique was used to select sample from the population. Researchers prepared questions for interview through reviewing the related literature which comprised 12 questions. After the experts' views and suggestions, interview sheet was finalized with 07 open ended questions. The researchers took emails and whatsapp numbers from university administration and approach 20 M. Phil students of Virtual University of Pakistan. Interview sheet was send through email or whatsapp to 20 M. Phil students for response. Researcher received the responses of 14 students of which 9 were male and 5 were female students. Researchers made the themes of the answers and analyze the responses of the students question wise according to themes.

Following questions were asked from respondents during interview:

1. What is your perception about the use of ICT in your program?
2. What kind of training do you have received from your institution regarding ICT before the start of program?
3. Do you feel that it is very easy to work with your program without proper training about the use of ICT?
4. What kind of training is necessary for your program of study?
5. Which kind of facilities must be provided by the institution to facilitate students?
6. Does it necessary to implement ICT at all levels of study in Pakistan? If yes then why?
7. What kind of suggestions do you have to implement ICT at all levels of study in Pakistan?

Results of the Interview Protocol

In the response of question no 1 of the interview, "*What is your perception about the use of ICT in your program?*" respondents replied that there are many aspect of the ICT but most common were noted here. Some of the interviewee responded that it was good experience but need some improvements. They also claimed that ICT is basically belonged to information and communication technology. There are a lot of examples of ICT like computers, smart phones and library etc. They claimed that ICT is a great innovation in the field of education. They have the view that their study program is online so use of ICT is compulsory in their program, without ICT their online study is not complete. It was also view of the learners that as they were studying in virtual university and their complete education is through internet and computer so ICT is fundamental in their course and it cannot be separated from their system. Role of online assignments, GDBs & Quizzes is important. ICT is very useful tool to communicate, create, publicize, store and manage Information. With the help of ICT they can get knowledge through innovative communication technologies, it is the best replacement of chalkboards/white boards with interactive digital system. These days' Information communication technology plays a vital role in education sector. Their study program is based on online study so use of ICT is mandatory in their program.

In the response of question no 2 of the interview, "What kind of training do you have received from your institution regarding ICT before the start of program?" they claimed that the use of Learning Management System (LMS) and website of the university, they have not received proper training. University has organized an orientation session before starting the study course to introduce the learners about this new technology in which they were informed about the use of technology which was very fruitful for them. Facility of weekly classes is offered by the university at their centers but no facility is available regarding ICT. They are of the opinion that they already have some knowledge about the technology that is helpful for them.

In the response of question no 3 of the interview, "Do you feel that it is very easy to work with your program without proper training about the use of ICT?", they replied that it is difficult for those persons who are illiterate in term of ICT. Some of them have view that they can easily work without having any formal training.

In the response of question no 4 of the interview, "What kind of training is necessary for your program of study?", They wrote that face to face class must be held in a week or two to let the learners discuss or argue their problem. They further claimed that basic training of MS Word, power point, excel along with SPSS and other statistical software's used in research is necessary for their study.

In the response of question no 5 of the interview, "Which kind of facilities must be provided by the institution to facilitate students?" they have the view that university should help them financially those who can't afford internet bundles or expensive PC's. University should give the chance to show case their abilities because in distance/online learning institutions, most of the learners feel some kind of hesitation or shyness on stage or before legends of the field or opposite gender while expressing them or their ideas. It was also suggestion from them that software's according to the need of research must be provided. Proper trainer for ICT must be appointed in sub centers/study centers of VU.

In the response of question no 6 of the interview, "Does it necessary to implement ICT at all levels of study in Pakistan? If yes then why?" respondents responded that it is necessary to implement ICT at all levels of studies in Pakistan because in modern and innovative age without ICT study is nearly impossible. It was also mentioned that it is impossible to complete the process in the rapid global challenges related to technology. It is the era of technology and use of ICT is in every field of life is mandatory, so there must be some level of practice of ICT at every level of education in Pakistan. But some of them were against and have the view that they think it's not necessary to implement ICT at all level because in initial level, learners can take knowledge properly from face to face learning by teachers.

In the response of question no 5 of the interview, "What kind of suggestions do you have to implement ICT at all levels of study in Pakistan?" respondents suggested that universities must use new technology to inform its learners about curricular and co-curricular activities. There should be proper training on ICT at all levels so that traditional setup can be modified with the advance one. Practical application of ICT must be introduced and implemented along with theoretical knowledge. University will provide latest software's for study with connection to ICT. In ICT related programs of M Phil level, length of course must be shorter, institute must arrange centralized workshops for learners for interaction to each other once in a month or after 3 months and institute will also manage social media groups for each level of students, also that there should be proper training on ICT at all levels so that traditional setup can be modified with the advance ones.

Conclusion and Discussion

It was noticed that learners think that they have good experience but need some improvements to use ICT. It is a great innovation in field of education so, without ICT their online study is not complete. It was also view of the learners that as they are studying in virtual university and their complete education is through internet and computer so ICT is fundamental in their course and it cannot be separated from their system. Role of online assignments, GDBs & Quizzes is important. ICT is very useful tool to communicate, create, publicize, store and manage Information.

Learners don't receive any training to use Learning Management System (LMS) and website of the university. University has organized an orientation ceremony before starting the study course to introduce the learners about this new technology in which they were informed about the use of technology which was very fruitful for them. Facility of weekly classes is offered by the university at their centers but no facility is available regarding ICT.

They were replied that it is difficult to use ICT for those persons who are illiterate in term of ICT. While telling about training necessary for their program of study, they replied that face to face class must be held in a week or two to let the learners discuss or argue their problem. They further claimed that basic training of MS Word, power point, excel along with SPSS and other statistical software used in research is necessary for their study as discussed by Ali, Riaz, & Wattoo, (2018).

Facilities those must be provided by the institution to facilitate the students, they have the view that university should help them financially those who can't afford internet bundles or expensive PC's. University should give the chance to learners to show their abilities to others because in distance learning universities, most of the learners feel hesitation on stage or before legends of the fields or opposite gender. It was also suggested that software's according to need of the research must also be provided. Proper trainer for ICT must be appointed in sub centers/study centers of VU. It was responded by the learners that it is necessary to implement ICT at all levels of studies in Pakistan because in modern and innovative age without ICT study is nearly impossible. It was also mentioned that it is impossible to complete the process in the rapid global challenges related to technology. Use of technology is enhancing and is used in secondary and higher secondary schools of Pakistan as Iqbal, Ali, Hassan, & Aalamgeer, (2014) stated in their study about application and practices in Pakistan.

University must use new technology to inform its learners about curricular and co-curricular activities by using ICT. There should be proper training on ICT at all levels so that traditional setup can be modified with the advance one. Practical implementations of ICT must be introduced with theoretical knowledge. Importance of ICT in teaching and learning is important at all levels as Ali, Nargis, Yasmeen, & Iqbal, (2015) believed in their research.

Recommendations

In the light of findings, following recommendations were made:

➢ Role of ICT to communicate, create, publicize, store and manage information may be enhanced by giving proper training.
➢ Facility of weekly classes may be offered by the university at their study centers.
➢ Learners may be trained to use ICT by arranging training at the start of program of their study.
➢ Learners may be forced to use ICT by providing extra marks on their time spent on using ICT gadgets
➢ Statistical software used in research and its training may be provided free of cost to facilitate students in their research projects.
➢ University may provide PCs or laptops and data bundles to needy and poor students with the collaboration of different National and International organizations.

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