

ASSESSING THE EFFECTIVE USE OF INTERNET TECHNOLOGY IN TEACHER TRAINING

Muhammad Safdar
PhD Scholar
Department of Education,
International Islamic University, Islamabad.
Safdar.phdedu34@iiu.edu.pk

Dr.N. B. Jumani
Department of Education
International Islamic University, Islamabad.
Nbjumani@yahoo.com

Nazar Abbas Nazar
PhD Scholar
Faculty of Education
Allama Iqbal Open University
Islamabad, PAKISTAN
Navyar222@yahoo.com

INTRODUCTION

Internet is an information superhighway that provides easy access to electronic ocean of knowledge on different topics contributed by people throughout the world. It has revolutionized every aspect of human life especially the field of education and training. The study was conducted to (i) teachers attitude towards the use of Internet technology. (ii) Instructional use of this technology and (iii) barriers/problems in the effective use of this technology. A sample of 300 teachers of BEd, MEd and MA Education was taken conveniently. A questionnaire was used as a research tool for the collection of data and Instrument reliability was .84 (Chronbach's Alpha). Collected data were analyzed through SPSS XIV by running frequencies, mean score and standard deviation formulas. Main findings of the study revealed that teachers' attitude towards this technology was positive. Though teachers were frequently using this technology in their instructions yet, they need intensive training for the effective use of this technology. Hence, a holistic model for the training of these teachers so that teachers may face the challenges of information era.

Key words: Teachers' Attitude, Internet, Instructional Use, Barriers

INTRODUCTION

Doubtless to say, Internet has presented immense collection of knowledge at the threshold of users. It is an information superhighway that provides unlimited access to a wealth of information on different topics contributed by people throughout the world. Due to its matchless characteristics, it is called the Adam of knowledge. Millions of electronic journals, e-books and such other information are accessible without any dissemination of area, creed or tribe at very low cost. Before the advent of this millennium 552.5 billion web pages or documents had been composed of over Internet and was growing by 7.3 million pages per day. The Internet is a global system of interconnected computer networks to serve billions of users worldwide. It is a network of networks that consists of millions of private, public, academic, business, and government networks of local to global scope that are linked by a broad array of electronic and optical networking technologies. (Wikipedia Encyclopedia, 2009)

The Internet offers a world of information in one place and it is very helpful tool in communicating and researching all different subjects efficiently and effectively. In research the

Internet provides wide opportunities for quicker access to relevant and current literature, access to wide range of instruments, online opportunity for validation of instrument, simulation of an on-going research, and on-line statistical analysis. Furthermore, collaboration in research (trans-institutional, trans-national and trans-continental) is possible, and wide range of opportunities exist for the dissemination of research findings (journals, personal web page, foundations/organizations' web pages, etc. Teachers must become familiar with using the Internet and its various functions such as e-mail. They must also learn how to use specific search tools in order to access information, search for lesson plans, or material and ideas to supplement their lessons. Lastly, language teachers must learn now to transfer files from Internet sites to their own computer and vice versa. The more enthusiastic and more knowledgeable language teachers are, the more successfully they can implement Internet in the language classroom. For the language learner, the Internet offers a world of information available to students at the touch of a button. However, some advantages using Internet in teaching and learning are given below:

- Internet has made communication efficient and effective over the globe. It provides facility of faster communication (Chatting, E-mailing, Video conferencing and Internet telephony etc.) to students and teachers not only area or countrywide but also worldwide as well. In this way every Internet user saves his time and money as well which was not possible otherwise.
- Users can update their knowledge in a meager span of time by net surfing and intensive and extensive study of their subject is possible in shortest time. They can make their time more useful through this technology.
- Researchers can thrust their thirst of knowledge through this technology as it provides immense knowledge at their threshold. They can get awareness to the new horizons of research. Besides advance material, online encyclopedias and dictionaries are also available on net. Researchers can upload their own work on the Internet for getting super guidance from national and international scholars.
- Latest news and information can be shared with colleagues and other people immediately.
- Students can send and receive back their assignment from their teachers and prompt feedback is possible through this technology. Further, this way is more secure and fastest as well.
- Internet promotes regional and international understanding and resultantly creates sense of internationality, coordination, cooperation, peace and harmony. Users can join national and international forums for broadening their vision.
- A vast and varied material like games, movies, songs, videos and music is available on the net for the entertainment of users. They can enjoy from this material and also can download from the net.
- Many job opportunities are advertised on the net and people can search and try to get suitable post through this technology. Similarly they can advertise their expertise on the web for earning money.
- Majority of the organization have started uploading results on the net and hence, candidates can check the results without wasting their time.
- E-learning is the swiftly growing mode of learning and this technology has supported and promoted the notion of lifelong learning worldwide especially in the technologically advanced countries.

However there are some problems, some of them are as under:

- Viruses
- Security Problems
- Immorality
- Filtration of Information
- Accuracy of Information
- Plagiarism
- Mutation of material and information
- Wastage of times and
- English language problems etc.

Realizing the ever increasing challenges and innumerable opportunities created by Internet technology, the Higher Education Commission (HEC) of Pakistan took some revolutionary initiatives. Some important measures are as under:

Pakistan Education Research Network

Pakistan Education Research Network (PERN) was a history maker initiative of HEC and through this program all Pakistani universities were facilitated with Mbps connectivity at fifty percent cost reduction. In 2007, new state-of-the-art PERN 2 was launched for bridging the gap between demand and supply of high quality advanced networking infrastructure. (HEC Annual Reports, 2004-05, 2006-07, 2007-08 & 2008-09).

National Digital Library

Launching of national digital library (NDL) was a magnificent step taken by HEC in 2004. Undoubtedly, NDL thrust the thirst of Pakistani researchers as access to more than 23000 world's peer reviewed electronic journals and 45000 e-books was provided to national scholars and researchers. (Amina, 2006, HEC Annual Report 2006-07 & HEC Annual Report 2007-08)

Pakistan Research Repository (PRR)

Pakistan Research Repository (PRR) was another valuable initiative of HEC and through this program approximately 3000 high quality digitized M.Phil and PhD theses have been uploaded on the web of PRR (<http://eprints.hec.gov.pk>). (HEC Annual Reports, 2008-09 & 2002-08).

MAIN PURPOSE

Main purpose of the study was to evaluate the use of Internet technology by teachers in teacher training institutions. Problems and barriers pertaining to the use of internet were also ascertained in this study.

RESEARCH METHODOLOGY

Sampling

It was a descriptive study therefore, survey was considered appropriate for this study. 300 teachers of B.Ed, M.Ed and MA Education in 2010 were taken conveniently as a sample of the study.

Instruments and their Development

In this survey, a questionnaire on five points (Likert Scale) was used for the collection of data. In the questionnaire items about attitude of teachers towards the use of internet, skills to use this technology, instructional use of internet and problems/barriers in the use of this technology were asked to elicit the valuable opinions of the respective respondents. Questionnaires from 221 teachers (out of 300) were returned back and finally 215 properly filled questionnaires were analyzed.

Table 1: Reliability coefficient of the questionnaire

Sr.No.	Focused Area	No. of Items	Mean	Standard Deviation	alpha
1	Attitude	10	3.43	.77	.91
2	Instructional Use	09	3.90	.86	.79
3	Barriers	05	3.96	1.1	.82
4	Overall	24	3.76	.91	.84

Data Analysis

The data collected through questionnaires were analyzed by using mean, percentage and standard deviation formulas through SPSS.

Table2: Teachers' Attitude towards the Use of Internet

S.No.	Statement	SA	A	UNC	DA	SDA	%	Mean	StD
1	Use of ICTs is easy	70	117	06	11	11	86.98	4.04	1.1
2	It is pleasant to use ICTs	43	109	11	38	14	70.70	3.60	1.18
3	Use of ICTs is very important	73	101	12	17	12	80.93	3.96	1.10
4	Use of ICTs is very interesting	86	81	18	16	14	77.67	3.97	1.17
5	I feel comfortable when I use ICTs	73	96	16	15	15	78.60	3.92	1.15
6	I feel confident when I use ICTs	43	108	26	24	14	70.23	3.66	1.12
7	Use of ICTs is valuable	44	81	41	35	14	58.14	3.49	1.78
8	Teachers' should aware about ICTs policy	86	85	25	11	08	79.53	4.07	1.03
9	Teachers' should have computer at home	96	75	23	14	07	79.75	4.11	1.05
10	Teachers' should have Internet connection at home	87	96	13	13	06	85.12	4.14	.971

Scale value for this table is SA (Strongly Agree) =5, A (Agree) =4, UNC (Uncertain) =3, DA (Disagree) =2 and SDA (Strongly Disagree) =1

It is evident from the table 2 that teachers have positive attitude towards the use of internet. Except of one statement "Use of ICTs is valuable" (58.14%), in the entire statements dominant majority (more than 71%) of the respondents expressed their opinions positively. Similarly mean score is more than 3.48.

Table3: Instructional Use of Internet

S.No.	Statement	SA	A	UNC	DA	SDA	%	Mean	StD
1	For preparation of presentations	64	97	16	26	12	74.88	3.81	1.15
2	For preparing handouts for students	52	103	37	14	09	72.09	3.81	1.15
3	For giving feedback to the students	40	106	38	13	08	67.91	3.67	1.05
4	For assessing students' assignments	28	106	32	36	13	62.33	3.47	1.10
5	For recording students' marks/ results	70	85	22	25	13	72.09	3.81	1.19
6	For communicating with your students	49	86	39	28	13	62.79	3.60	1.15
7	For searching national or international conferences	70	85	23	29	08	72.09	3.84	1.13
8	For preparing conference papers	67	76	28	36	08	66.51	3.73	1.18
9	For publishing research papers	73	67	19	21	35	65.12	3.57	1.45

Scale value for this table is SA (Strongly Agree) =5, A (Agree) =4, UNC (Uncertain) =3, DA (Disagree) =2 and SDA (Strongly Disagree) =1

Table 3 shows that teachers mostly use internet for the preparation of their presentations, preparation of handouts for students, saving students' records and searching conferences. However, they are frequent user of this technology for preparing conference papers, giving feedback to the students, communicating with their students, publishing research papers and assessing students' assignments. In all the statements percentages is over 62% and mean score is more than 3.47.

Table4: Barriers/Problems in the use of Internet

S.No.	Statement	SA	A	UNC	DA	SDA	%	Mean	StD
1	Lack of hardware	86	96	13	11	09	84.65	4.11	1.02
2	Lack of software	83	91	20	12	09	80.93	4.06	1.04
3	Lack of training	83	94	21	10	07	82.33	4.10	.979
4	Lack of technical support	71	59	30	33	22	60.47	3.58	1.35
5	Power Failure	83	82	18	19	13	76.74	3.94	1.17

Scale value for this table is SA (Strongly Agree) =5, A (Agree) =4, UNC (Uncertain) =3, DA (Disagree) =2 and SDA (Strongly Disagree) =1

It is evident from the table 4 that lack of hardware, lack of training and lack of software are the main barriers in the use of internet. Power failure is big problem for them as compared to lack of technical support. Majority of the respondents agreed that above mentioned barriers were major problem for them in the use of this technology and mean score is more than 3.57 in all the statements. (Kuiper, Volman & Terwel, 2008, Madden, Ford, Miller & Levy 2006; Scott & O'Sullivan, 2005; Walton & Archer, 2004; Bilal, 2001; Sorapure, Inglesby, & Yatchisin 1998).

CONCLUSIONS

Doubtless to say, that Internet is very useful tool for enriching teaching learning process especially for enhancing research output. An easy access to electronic ocean of knowledge provides opportunity of intensive and extensive study of subject matter. Teachers have positive attitude towards the use of Internet. They are frequently using this technology for the preparation of their presentations, preparation of handouts for students, saving students' records and searching conferences. They are fluent user of this technology for preparing conference papers, giving feedback to the students, communicating with their students, publishing research papers and assessing students' assignments. However, they feel some problems in the proper use of Internet for teaching due to lack of hardware, lack of training, lack of software, power failure and lack of technical support.

Therefore, a more holistic approach for the training of teachers may be used so that optimum benefits may be achieved from this technology. Maximum deployment of computers and internet may be ensured in teacher training institutions.

REFERENCES

- Amina, S. (2006) Accessing Electronic Information: A Study of Pakistan Digital Library. Oxford.
- Government of Pakistan (2003) National Information and Communication Technology Strategy for Education in Pakistan, Islamabad.
- Higher Education Commission (2004) Annual Report 2003-04, Islamabad.
- Higher Education Commission (2005) Annual Report 2004-05, Islamabad.
- Higher Education Commission (2005) Medium Term Development Framework 2005-10, Islamabad.
- Higher Education Commission (2006) Annual Report 2005-06, Islamabad.
- Higher Education Commission (2007) Achievements of the Higher Education Commission (HEC) July 2004-June 2006, Islamabad.
- Higher Education Commission (2008) Annual Report 2006-07, Islamabad.
- Higher Education Commission (2009) Annual Report 2007-08, Islamabad.
- Higher Education Commission (2009) HEC Report 2002-08, Islamabad.
- Higher Education Commission (2010) Annual Report 2008-09, Islamabad.
- Wikipedia Encyclopedia (2009) www.wikipedia.cm

Biodata of Authors

MUHAMMAD SAFDAR is a Ph. D Scholar in the Department of Education, International Islamic University Islamabad, Pakistan. He did M.Phil in education from Allama Iqbal Open University (AIOU) Islamabad. His area of research in M.Phil was Feasibility Study of Guidance and Counselling Provision at the Regional Offices of AIOU. Now in PhD his area of research is Emerging Paradigm of Information and Communication Technologies (ICTs) Use in Teacher Training Institutions of Pakistan. His areas of interest are distance and non-formal education, guidance and counseling, women development, teacher training, information and communication technologies, human resource development.



Muhammad Safdar

Dr. N. B. JUMANI has been working as Dean, Faculty of Social Sciences at International Islamic University Islamabad, Pakistan. He has acquired his academic credentials for M.Ed, M.Phil, Ph.D and Post Doc. His areas of study and specialization have been Curriculum Development, Teacher Education, and Distance Education. Dr. Jumanı has been widely published in different journals of repute both within Pakistan and outside. His work has got space in the International Journals published not only in Pakistan, also from USA, UK, Australia, Japan, Turkey, India, Africa and Azerbaijan. Dr. Jumanı is on the Editorial Board of Journals of high standards, like IRRODL (Canada), Asian JDE (Japan), TOJDE (Turkey), EJEL (UK), Quarterly Review of Distance Education (USA), CIER (USA) etc, in addition to being the Chief Editor of IJTAR, on the Board for Pakistan Journal of Education and Journal of Educational Research published by Islamia University Bahawalpur, Pakistan.



Dr. N. B. Jumanı

NAZAR ABBASS NAZAR is a Ph. D Scholar in the Faculty of Education, Allama Iqbal Open University (AIOU) Islamabad, Pakistan. He did M.Phil in education from AIOU, Islamabad in 2006. His area of research in M.Phil was An Investigation into the Training Needs and Opportunities for unemploy Adults in Pakistan. Now his area of research in PhD is A Study of Reflective Pedagogy Approach in Teacher Training at AIOU. His areas of interest are Teacher Training, ICTs, and Human Resource Development.



Nazar Abbas Nazar