# Investigating the use of Computer Technology for E-learning in Pakistani Maddaris: Case of Religious Teachers

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### Abstract

The current study explored issues and challenges faced by religious Teachers for using ICT in e-learning and teaching. The study was quantitative based on descriptive survey design. The questionnaire was constructed using five point Lickert Scale and data were collected from 150 Religious teachers currently teaching to the students in Madaris at District Vehari of Punjab, Pakistan. The data were analyzed on SPSS through descriptive analysis. The findings of the study revealed that religious teachers face various issues and challenges like non-availability of the computers and laptops, shortage of electricity, lack computer education, theoretical based course work, lack of interest from the senior teachers towards learning or using computers, insufficient time for ICT use. Besides, many female religious teachers who cannot operate computer, they have to do domestic duties and resultantly too, they cannot afford extra time for learning computers. The study concludes that without addressing these issues, inculcating the use of ICT is a complex phenomenon in Pakistanni Maddaris. Hence, the policy makers, stake holders and administrative staff should target these issues so that advantages of ICT in teaching of religious education may be provided to religious teachers in Pakistani Maddaris.

Key Words: Teachers, Stake holders, Policy makers, ICT, Pakistani Maddaris

# 1. Introduction

The use of educational technology has been in practice from the second half of the 20<sup>th</sup> century and particularly in the educationally and economically advanced countries, technology entered in the schools' life in the late 1950s and this technology is still developing day by day. In the present era, use and availability of educational technologies are easier and convenient to for storing a large amount of data. Using advanced educational technology is effective in handling sounds, pictures, teaching practices and many other things which this technology can develop quickly. Using internet has reshaped teaching practices especially at the end of the 20<sup>th</sup> century because with the help of internet in e-learning and distance education, the learners were able to connect all over the world to achieve their global objectives of education. In this regard, computers and other internet devices work as not only a tool for education (religious and formal) but a good source of knowledge as well.

The traditional educational systems are going to fluctuations day by day and students are appearing to be more active. Teachers use computer technology for educational purposes in their classrooms (Edwards-Groves, 2012). The use of mobile, tablets, smart-phone technologies etc. have brought innovations in receiving and imparting education. In the present time, the educational technologies have turned more complex but useful than in the past (Levy, 2009). Use of educational technology gives an interesting way to have communication with in online chat and discussion to meet their educational goals (Gill, 2011). Hence, computer knowledge in every field of life is being increased according to ever increasing needs of the teachers as well as students. It is a choice of teachers and students to choose which technology is useful and efficient. Computer technology has also changed the learning atmospheres because availability even out of classroom boundaries the use of mobile devices is possible (Abdollapour & Maleki, 2012).

It may be useful in improving four skills of language like speaking, writing, reading and listening for teachers and students in Pakistani Madaris. Knowledge can be transferred with the use of internet from online data sources as a lot online data are available to be used for religious education. Learning with the help of computer technology has a lot of advantages for both teachers and students of Pakistani Madaris. Our educational system is not advanced enough to meet the requirements of international standard of education because our country is not as developed as other countries of Europe. In this context, the use of computer technology is not an easy assignment especially in all educational institutions of Pakistan. Besides, a lot of issues involved in the way of computer assisted language learning in Pakistan. Teachers neglect the use of technology in the classroom because of personal and environmental reasons.

Teaching and learning has been changed by the integration of computer technology in the classroom (Hoopingarner, 2009). In Pakistan, most of the educational institutions are not using computer technology because they have some issues. Mostly they have no interest, in its use in the classroom. They are not able to purchase the technology by themselves. It is a good that now Government of Pakistan is taking initiatives for the religious schools. Teachers in religious schools face a lot of barriers related to use of technology. They have little time and some financial problems to have an access to use of technology, lack of technical staff in religious institutions are the issues in the implementation of latest development in religious and formal educational institutions. Now the question is to explore the challenges and barriers related to its

use in the classroom. Studies found the difference and proved that students using computer assisted instructions performed better than students not using computer assisted instruction of learning (Grgurovic, M., Chapelle, C. A., & Shelley, M. C. 2013). Computerized tests take less time than traditional tests with paper and pencil and are more reliable (Madsen, 1991). Students can repeat their learning activities in schools and their educational institutions and can improve their learning habits individually. Students can correct their pronunciation and way of talking, their intonation etc. Learners can expand their access and explore lot knowledge by using online data sources. It is important to note that technology has changed the educational format especially with the arrival of internet, both teacher and students can get a lot of knowledge, they required (Levy, 2009).

Choi and Lee (2008) conducted a research to know the current trends and issues related to student learning in Asia. The study revealed that due to issues related to class hours, national curriculum and text books, English as medium of instruction, political environment; social and individual, the students are unable to improve their learning effectively. In this regard, another study was carried out in Saudi Arabia when Hani (2014) conducted a research about Benefits and Barriers of Computer Assisted Learning and Teaching in the Arab world. The study found out problems like inadequate number of computers, teacher's training, and shortage of time, technological problems and high cost of computers. The study proved that ICT USE enhanced the learning abilities and interest of the learners with useful material etc.

Regarding religious school education in Pakistan, Bhatti et al. (2014) carried out a research to explore the trends for internet usage among religious teachers at Lodhran District in the southern Punjab of Pakistan. His research findings revealed the lack of availability of educational technologies and load shedding issues to be the major problems in Madaris. Unavailability of internet facilities was also revealed as one of bigger issues. Another research scholar Haider (2013) explored teachers' perceptions and attitudes towards using ICT in Pakistani Madaris. The results of this research also revealed that teachers were found inclined for using educational technologies and wanted implementation of ICT in religious schools owing to their significant effectiveness. The teachers mostly agreed that use of ICT would increase their efficiency for their learner's interest and help to motivate the students because it would not only be time saving but enjoyable also. Besides, Hassan and Sajid (2013) also investigated the effectiveness of ICT use in teaching and the problems faced by religious teachers in Punjab province in Pakistan.

Results of this research revealed that most of the teachers were found interested in integration of ICT in teaching and learning. However, this study found that there were many hurdles like lack of computer lab, lack of computer availability, lack of teachers' experience with computer assisted teaching and financial support were also a big hurdle.

### 1.1. Statement of Problem

Computer technology is very significant for EFL learning but unfortunately most of the teachers are not able to use computers for language teaching. In the advance world of technology, teachers have challenges to acquire the skill of using new technologies in language teaching. The Government and nongovernment NGOs are trying to give awareness to the teachers of using new techniques in the teaching of English. This issue is required to address in Pakistani Madaris teachers to facilitate their students with online data sources and use of distant learning education form online education.

### **1.2.** Objectives of the Study

Following are the objectives of study:-

- To explore issues and challenges faced by teachers for using ICTin Pakistani Maddaris in Punjab, Pakistan.
- To find out the teachers' skill for using of ICT in teaching of English to students in Pakistani Maddaris.

#### 1.3. Hypothesis

 $H_{01}$  There is no difference between male and female religious school teachers in using ICT in Maddaris in Punjab, Pakistan.

# 2. Methodology

The current study is descriptive based on survey design. Questionnaire with close ended statements was developed on Five Lickert-type Scale (Agree, strongly Agree, Neutral, Strongly Disagree and Disagree) to collect quantitative data. The population was intermediate Madrissa teachers in Punjab, Pakistan. Simple random sampling technique was used to collect data. Sample population was selected from six (three male and three female Dini Madaris (Religious Schools) of District Okara. In the selection of sampling, random sampling technique was used to approach target population.

# 3. Data Analysis and Interpretation

The data were analyzed to extract the responses of the both samples of population by using Statistical package for Social Sciences (SPSS). To measure of difference between male and female religious teacher if the lower value of 95% confidence interval is above zero or upper values below zero statistical significance 0.05 level was achieved.

 Table 1. Level of Opinions from Five Point Rating Scale Questionnaire

Levels of opinion	Standards
Highest	4.50 - 5.00
Higher	3.50 - 4.49
Average	2.50 - 3.49
Lower Lowest	1.50 - 2.49 0.00-1.49

Table 2. Showing Issues and Challenges Faced by Teachers in Pakistani Maddaris

No	Teachers' opinions	St. Deviation	Mean Score	Mean Values
1	There are some problems in using computers technology.	1.22	4.78	Highest
2	I have financial problems in purchasing computer in Teaching of English.	1.24	4.76	Highest
3	Learning computer technology requires extra time.	0.60	4.40	Highest
4	Energy crisis is a barrier in having regular assistance of computer.	0.69	4.31	Higher
5	Internet facility is not available in Pakistani Maddaris.	0.74	4.26	Higher
6	I know how to use talking tutors and Dictionaries.	0.70	4.30	Higher

Table 2 shows responses on issues and challenges using ICT USE technique. The statement 1 in the above table finds out the problems of teachers due to lack of knowledge. The arithmetic mean score of the teachers' response is 4.78 that show the highest level of agreement of the teachers' opinions. The results reveal that Religious teachers have serious issues related to the use of computer technology due to lack of knowledge. Statement two in the above mention

table is to find out the financial problems of EFL teachers. Here means score of Religious teachers on this statement is 4.76 which show the highest level of opinions. The result reveals that Religious teachers have financial problems or they have not extra money to purchase computers or laptop to facilitate the class. Statement three explores the issues related to time management. The arithmetic mean score of EFL on this statement is 4.40 which again results in the highest level of opinions. From the results it can be deduced that learning to use computer to facilitate students requires extra time but they are pressed for time. Statement four in the above table is to obtain information about the teachers' issues related to the load shedding or barriers of energy. Here means score on their agreement related to this issue is 4.31 which show the higher level of opinion. The results indicate that energy crisis is a barrier in implementing ICT USE. Pakistan has been seriously facing energy crisis for the last many years. The short fall of electricity is also affecting the progress of education as well. Statement five is to gauge information on the problems arising from lack of internet facility. Mean score about this statement is 4.26 which also indicate the higher level of opinion meaning hereby that institutions have lack of internet facility for teachers. The statement six is to find out the problems of teachers about knowledge of computer related programs. The mean score of the teachers' response is 4.30 which indicated the higher mean values according to the levels of opinion. The results reveal that teachers have knowledge about talking tutors and electronic dictionaries for Dini Madrissas have. The interpretation of the data shows that on rating scale statistical results reach the highest and the higher level of opinions which reveals that results are highly significant which prove that many of the Religious teachers face a lot of problems and issues in using computer as a tool for teaching English at intermediate level. Energy crisis, lack of knowledge about the use of computer and financial problems are the most important issues due to which they think that ICT USE technique cannot be successful in the teaching of English.

No	Teachers' Opinions	St. Deviation	Mean Scores	Mean Values
1	I know how to tackle functional problems of computer.	1.84	3.16	Average
2	I have enough time to manage Dini Madaris have room in the given time at Maddaris.	1.57	3.43	Average

Table 3. Teachers' Skill for Using ICT in Pakistani Maddaris

3	I can myself install English learning Software.	1.52	3.48	Average
4	Dini Madaris have sufficient technical support regarding computer application at Pakistani Maddaris.	1.60	3.40	Average
5	Skill in computer application helps Teachers in Maddaris in teaching English.	1.08	3.92	Higher
6	I have interest in learning and using computer for teaching English.	1.04	4.96	Highest

Table 3 shows information on teachers' skill for using ICT USE technique. The statement one in this table is to find out if ELT teachers how to tackle functional problems of computer. The mean score of this statement is 3.16 which show average level of opinion which means that all teachers are not able to solve the functional problems of computer. Second statement is to investigate the time management of the Teachers in Maddaris related to using computer. Here means score is 3.43 which also show the average level of opinion which means that teachers are not able to manage the extra time for ICT USE application. Statement 3 is to investigate the teachers' skill related to the using computer. Mean score on this statement is 3.48 which show the average level of opinion which indicates that many Teachers in Maddaris have no sufficient skill to undertake installation of language programs. The statement four is to gauge information if Dini Madaris have sufficient technical support regarding computer application in Dini Madaris. Mean score of this statement is 3.40 which show higher level in the level of opinion. The result reveals that many institutions have no sufficient technical support in using computer in Dini Madaris. Statement 5 finds out if Teachers in Maddaris have good skills in using computer for the benefit of learners in teaching English. The arithmetic mean score of this statement is 3.92 which show higher level of opinion. The result revealed that Religious teachers know well that computer skill is very helpful for EFL students. The statement 6 is to explore perceptions about Madaris (religious) teachers whether Teachers in Maddaris have interest in using computer. Mean score of this statement is 4.96 which reveal highest level of opinion which means that the teachers are very much interested in learning and using computer for teaching English.

The interpretation of the data shows that on rating scale, most of the statistical results reach the average level and only two reach the higher level of opinions which reveal that results are not significant which prove that many of the religious teachers are unable to handle computer related issues. On top of that they are unable to manage handle issues due to limited time specified at Dini Madaris (Religious Schools). They are also unable to do installation of computer. But the higher level of opinions reveals that there are some teachers who can use computer and they know that use of computer can give them ample understanding into latest knowledge about teaching techniques and methodologies.

Table 4. Mean, Standard Deviation & T- Value for the Scores of Issues and Challenges Faced by Teachers in Religious School

Variable	Gender	Ν	Mean	SD	Т	Р
hallenges	Male	100	13.67	1.29		
barriers in ICT USE	Female	50	14.69	1.19	2.11	0.035***

(df=118, \*\*\*p<0.01)

The statistical results in the above table expose that the t-value for both male and female teachers at higher secondary level is 2.11 which is obviously greater than the standard normal value 1.96. This statistical analysis reveals that teachers (both male and female) have to almost equally face the challenges and barriers related to the use of computer assisted language learning. The results also point out that both male and female teacher face challenges and issues in using ICT USE technique during teaching English language. Female teachers face problems a little more than male teachers because female teachers face the problem of distance from their home to the computer learning institutions. They also face time problems because almost all female teachers have to manage their domestic responsibilities. So they are interested in using Computer technology but they face a lot of challenges. P-value \*\*\*0.035 which is less than 0.05 shows important and accepted hypothesis that both male and female tendency is almost the same which clearly means that they face same issues and barriers while using ICT USE for teaching English as foreign language. If compared mean score between male and female teachers, it is revealed that female there is no any significant difference (Male: 13.67 and female: 14.69) which also shows that both male and female face the same level of problems for using ICT USE for teaching English.

Table 5. Mean, Standard Deviation & T- Value for the Scores of Comparisons of Teachers' Skill for Using Computers in Teaching English

Variable	Area	Ν	Mean	SD	Т	Р
Teachers' Skill in	Male	100	14.47	1.51		
Using computers	Female	50	10.87	2.74	3.34	0.021***
(df=118, ***p<0.01)						

The statistical results in the above table reveal that the t-value for both male and female teachers at higher secondary level is 3.34 which is obviously greater than the standard normal value 1.96. This statistical analysis exposes that the hypothesis about teachers (both male and female) have great tendency towards the teachers' skill for using computers in teaching English. The results also signify that comparatively female teachers have problems related to skill for using computer technology in the class rooms. They have lack of knowledge related to the computer use according to their lesson plans. They also show lack of interest in learning computer skills because they do not want to go outside from their homes after their working hours. P-value \*\*\*0.021 which is less than 0.05 represents highly noteworthy and established hypothesis that both male and female tendency is lower to the significant level which clearly means that female teachers are lower in the use of computer skills. If compared mean score between male and female teachers, it is revealed that there is a significant difference (Male: 14.47 and female: 10.87) which also reveals that both male and female have difference in level of skill for using computers in teaching English. Results in comparison are further described in the following figure 1 with Box-plot.

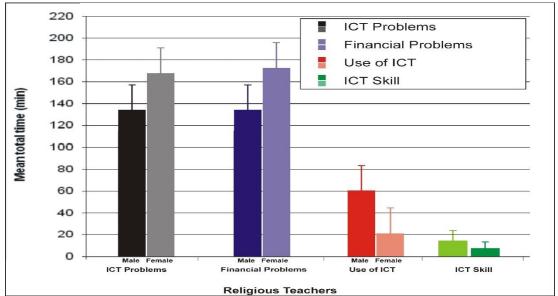


Figure 1 Box-plot results for gender comparison

Box-plot shows comparison of attitudes and ICT skill of male and female religious teachers towards ICT.

# 4. Discussion

#### 4.1. Phase I

The results expose that both male and female teachers at higher secondary level found the issues and challenges for using computer technologies in the class rooms. Research conducted by Mahdi (2013) about Issues of Computer Assisted Learning reported technical issues, pedagogical, personal, institutional and socio-cultural issues were noticed. In Pakistan most of the teachers have not been found financially strong enough to buy their own laptops. They also have not enough money to spend on getting trainings individually on their own behalf. The results also point out that both male and female teachers face challenges and issues in using ICT use technique during teaching because they have not their own laptops to practice at home. Female teachers found the problem of distance from their home to the computer learning institutions because training institutions are not near to home and they found problem to come to there after teaching hours. They also found time management problems because almost all female teachers have to work and manage their home as well. Unlike male teachers, they were not found as free time to go outside the home to learn the computer skills. So, they were attracted in using computer technology but they face a lot of challenges to get benefit from this technology. In (2013) a research about ICTs in learning conducted by Hassan & Sajjid in Pakistan which investigates the challenges and barriers related to the use of computer technology in the Dini Madrissas and found the financial, technical and institutional problems. Time factor was also very important because teachers remained tired after teaching hours. Most of the institutions were found having lack of internet facility. So, teachers remained helpless in getting and to get up dates about their disciplines. The teachers had lack of knowledge of computer skills.

### 4.2 Phase II

Results also revealed that female teachers are lower in computer skills. They were not found enough skill to install programs by themselves. It was found that some institutions support computer applications and provide trainings to their teachers but they remain unsuccessful because of shortage of computer availability. Besides, institutions did not provide trainings to their teachers. Age factor also proved to be important because young teachers have the interest to use computer technology related to their subject but senior teachers have shown lack of interest and knowledge about using ICT in providing Islamic education. Female teachers were also found having lack of knowledge and confidence. So, they remain shy and careless about the use of technology.

# 5. Findings & Conclusions

Findings of this study revealed that the use of computer technology has good and flourishing impacts on students' e-learning in Pakistani Madaris. Skillful use of ICT for e-learning can broaden the teachers and students' outlook towards religious education and modernization. It is a fact that religious teachers face serious issues like lack of financial possessions, English language difficulty, lack of skills in using computer technology, and embarrassment in using information technology. Besides, unwillingness of the teachers, economic problems, safety of equipment, extreme breakdown of electricity, lack of Administrative support, lack of training, lack of inspiration, age factors were also issues which are faced by religious teachers in Pakistani Madaris.

### 5.1. Conclusion

The study concludes with not only issues and challenges faced by religious school teachers but reveals usefulness of ICT use in teaching religious education. The revolutionary interest from the Government of Pakistan for the significance of computer technology in education sector (National Education Policy, 1992) in the words that all educational institutions and training programs should be consisted of computer education as a compulsory component to be used as tool to reinforce the teaching-learning process. National Education Policy (1998-2010) also proposed valuable initiative for the induction of ICT use at all levels in educational and religious institutions and this situation indicates the bright future for ICT use in the religious and formal education system of Pakistan. Hence, in continuation of the previously conducted studies the current study invites the attention of the Policy makers and the stakeholders to facilitate the Religious teachers with computer and other information technologies (as students are provided laptops) along with pre-induction training at Dini Madaris (Religious Schools). However, success of ICT use and practices is adjacent to the treatment of issues and challenges of religious teachers in Pakistan too.

# 5.2. Recommendations

- 1. The recommends that the religious teachers in Madaris should be provided proper training for ICT use so that they may get the advantage of latest technology use.
- 2. The study also recommends that religious teachers should be provided opportunities to attend international workshops which will enhance their interest and ultimately they will be able to get innovations in the teaching of religious education.

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