ICT Use for Effective Teaching-Learning Process in Secondary Schools in Punjab Province

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ABSTRACT

In this technological era, the use of information communication technology influencing the teaching and learning habits of teachers as well as students to a great extent. Pakistan is in the preliminary stages in the use and integrating ICT in teaching learning process in educational institutions like the other developing countries in the world. The objectives of the study mainly deals with the use of ICT to make teaching learning process effective and the factors influencing use of ICT in teaching learning process in secondary schools. The study was a survey descriptive in nature. All the secondary school teachers were the population of the study. Data were collected from 200 secondary teachers as sample of the study through questionnaire. Data were analyzed through statistical tools of frequency and simple percentage. The findings of the study indicate that secondary teachers have a keen desire for the use of ICT and its integration within classroom environment. The study concluded stakeholder in education should facilitate the secondary teachers in the use of ICT and must have to support the secondary school teachers through the conduction of trainings in ICT. The study may recommend that ministry of education has a vision to provide funds for department of education for the development and promotion of ICT at secondary level.

Keywords: ICT, Teaching learning process, secondary schools

INTRODUCTION

During the few last decades, the provincial governments investing on ICT for the development and promotion of teaching-learning environment in governmental institutions. The teacher community and students are also feeling interest in all this process. In this technological era, ICT can enhance the teaching learning environment within classroom quiet efficiently. Information and communication technology is an integral and inevitable part of the contemporary age. In fact, the masses and culture have the responsibility to meet the challenges of the explosion of knowledge in this technological age. The occurrence of information communication technology has brought about rapid technological, social, economic and political revolution.

Pakistan is in the preliminary stages in the use and integrating ICT in teaching learning process in educational institutions like the other developing countries in the world. No doubt, there are number of barriers in the use and integrating ICT in educational institutions. There are number of factors that influence the use of ICT in the institutions to make the teaching learning process effective. Information communication technology is a mean of capturing, integrating information, storing, processing communication information. Information communication technology encourages independent learning. ICT is very much important for teachers and students because it provides opportunities of learning at both end i.e. students as

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well as teachers. ICT enhances the active learning and students feel self-responsibility in the teaching learning process within the classroom and outside the classroom. A teacher can easily plan and prepare his lessons and design the procedure and material such as contents, contents delivery and also facilitate the sharing of resources with students in the light of his experience and knowledge.

OBJECTIVES OF THE STUDY

1. To explore the use of ICT to make teaching-learning process effective in secondary schools

2. Identify the factors influencing use of ICT in teaching-learning process in secondary schools

REVIEW OF LITERATURE

The effective use of ICT in the teaching-learning process as well as within the classroom is relatively a new trend in the developing countries. The effective usage of this technology within the classroom poses a challenge to teachers and administrators equally. According to Ali, Haolader & Muhammad (2013) revealed that teaching staff and administrators had a strong desire to integrate ICT into teaching-learning processes within the classroom practices. ICT usage has revolutionized all the fields, the innovations that ICT has brought in action in teaching-learning process include: quick access to information, online student registration, reduce burden of keeping hardcopy all the time and networking with the resourceful persons as well as e-learning. In the field of education, all the above mentioned factors enhanced the chances of excellent integration of ICT in teaching- learning process.

According to Hennessy, Harrison & Wamakote (2010) use of Information and Communication Technology (ICT) in primary and secondary schools with a particular emphasis on improving the quality of subject teaching and learning in classroom. The above mentioned study focuses on the influence of internal factors on teachers' use and lack of use of information communication technology in the classroom. The use of information communication technology and pedagogical implications for initial teacher education and professional development of teachers bring schooling within developing contexts into technological century.

Students and teachers in Pakistan have greater tendency for using information communication technology for academic purposes, particularly in government institutions (Iqbal, Ali, Hassan and Aalamgeer, 2015). The government of all the provinces was taking positive steps for introducing information communication technology. Presently, information communication technology is an essential element from the elementary level in Punjab Province.

According to Yusuf (2005) the national policy for information technology places little emphasis on the amalgamation and blend of ICT in the country's education system. In the ending of his study, he suggests that policy implications and suggestions are offered to ensure maximum use of ICT potentials in the Nigerian school system. There is a detailed policy of information technology in Pakistan at national level, about the advancement of information technology in Pakistan from gross root level. In the Punjab Province, government is introducing learning of secondary students through the use of technological devices like tabs. Presently, the ministers of education and technology are feeling the premeditated importance of ICT for national development. Successful application and implication of ICT in every

sector can only be assured through need analysis in needed areas. Acknowledged gaps should be filled through the involvement of stakeholders in education sector.

The study of Gulbahar and Guven (2008) showed the results that teachers have a keen desire to use ICT resources and are aware of the existing potential in the field of education; they are facing problems in relation to ease access toward ICT resources and lack of in-service trainings opportunities in the education sector. The researchers observed that secondary teachers have trainings regarding information communication technology but the resource persons try to kill the time in the name of so called knowledge sharing. In order to improve Information communication technology facilities and in the enhancement of the skills of teachers, the Ministry of Education have to take interest for the growth and development of ICT resources. The government has the responsibility to provide in-service training in conducive environment by the skilled and well versed personnel in the field of ICT.

According to Achimugu, Oluwagbemi, Oluwaranti (2010) the result of the research suggests that information communication technology is becoming a driving force for educational reforms and that information communication technologies have become an integrative part of national education policies and plans in Nigerian tertiary education. In the field of education, ICT can play an essential role for the teaching of teachers and learning of students. ICT play a role as a catalyst in education, to enhance the speed of teaching learning process among teachers as well as students.

The use of information communication technology is drastically changing our lives and our routine habits. It also is making an impact on our social, moral, ethical and economical values in an active mood. Anderson (2005) narrated that information communication technology is changing students' learning habits in institutions and the real potential of information communication technology is the way it changes learners and their learning habits. In information communication technology, there is a term e-learning, a term that combines pedagogy and technology in this technological era. For this prospective to be realized, teacher's technical skills and development is inevitable, critical, and at this end some of the rich resources available for the use of teachers through global windows are described. So, there is a dire need to conclude all those factors of information communication technology that are effective for the effectiveness of teaching learning process at secondary schools.

RESEARCH METHODOLOGY

The present study is a descriptive survey type research and quantitative analyses of data were used in the research study. The population of the study comprised all the secondary school teachers in Punjab province. The target population of the study is taken from the Districts Vehari, Pakpattan, Okara and Khanewal. The sample of study took from the target population. The sample of 200 secondary school teachers has been taken from the target population. Ali, Haolader, Muhammad (2013) used a questionnaire in their study. The same questionnaire was used with a little alteration. The questionnaire was comprised the items regarding the opinions of the respondents on the factors influencing the use of information communication technology making the teaching learning process effective in secondary school of Punjab province. The researchers personally visited the sites and instruct the respondents about the filling of questionnaire. 100% fully completed questionnaires were returned from the respondents. The most common statistical tools of frequency and percentage were used to analyzed and interpret the data.

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ANALYSIS AND INTERPRETATION OF DATA

The use of ICT in teaching learning process and the factors influencing use of information communication technology for effective teaching learning process in secondary schools presented in the following table;

Table 1. Opinion of teachers regarding the factors influencing use of ICT for effective teaching learning process in secondary schools

Sr. No.	Statement	SA	A	U	D	SD
1	Teachers with more education are likely to use ICT resources in teaching-learning process more effectively.	44	120	-	30	6
		22%	60%	-	15%	3%
2	Teachers who have access to ICT resources are likely to integrate technology in teaching-learning process.	62	100	10	12	16
		31%	50%	5%	6%	8%
3	Teachers' computer self-efficacy has greater effect in teaching learning process.	70	74	10	30	16
		35%	37%	5%	15%	8%
4	Teachers' gender differences influence use of ICT in teaching.	64	34	42	46	14
		32%	17%	21%	23%	7%
5	School education department should replace the traditional teaching aids by new ICT tools to improve the teaching-learning process.	64	106	4	16	14
		32%	53%	2%	8%	7%
6	Teachers' attitude influences successful integration of ICT into teaching.	60	94	14	24	8
		30%	47%	7%	12%	4%
7	Government has a good policy to improve the present condition of ICT in secondary schools.	70	94	10	10	16
		35%	47%	5%	5%	8%
8	Head teachers' leadership is strongly related to teachers' use of computer technology in teaching.	40	130	10	16	4
		20%	65%	5%	8%	2%
9	The school education department supports teachers in ICT trainings.	-	-	10	30	160
		-	-	5%	15%	80%

In the above mentioned table, majority of the teachers (82%) have the opinion that teachers with more education have the use of ICT in teaching learning process in an effective way. 81% teachers have the opinion that the teachers have access to ICT, integrate technology in teaching learning process. 72% opinion of secondary teachers show agreement toward the statement that teachers self-efficacy has great effect in teaching learning process. There is difference in teachers' opinion about the statement that teachers' gender differences influence use of ICT in teaching process. 85% secondary teachers have the opinion that traditional

teaching aids should be replaced with the new ICT tools to improve the teaching learning process and about another statement 77% teachers have the opinion that teachers' attitude influence successful integration of ICT into teaching. Majority of the teacher 82% are agreed that government has a good policy to improve the present condition of ICT in secondary schools. 95% secondary teachers are disagreed with the statement that school education department supports teachers in ICT trainings.

CONCLUSION AND DISCUSSION

The use of ICT in all the fields across the board are making drastic changes in societies of twenty first century and it also affected the application and integration of ICT by the teachers in teaching learning process. According to Iqbal, Ali, Hassan, and Aalamgeer (2014) students and teachers in Pakistan have greater tendency for using ICT for academic purposes especially in government institutions. The findings of the present study indicate that secondary teachers have a keen desire for the use of information communication technology and its integration within classroom environment. But secondary teachers encountered with many hurdles and obstacles in the way of using ICT in the classroom. It required a huge amount of revenue in the form of investment by the government. The study concluded that the teachers have more higher education are more interested in the use of information communication technology and they can make the better use of ICT in an effective manner. It is also concluded that teachers' gender differences make a great influence on the use of ICT in teaching learning process. It is derived from the findings of the study; government should replace the traditional teaching aids by new technologies for the better learning of students and these technological aids would play a convenient role in the teaching of secondary school teachers. It is also concluded that school education department should have to facilitate the teachers in the use of ICT and must have to support the secondary school teachers through the conduction of trainings in ICT. According to Shaikh and Khoja (2011) for the better development and growth of Pakistani coming generations in this technological century, Pakistan should foster its educational sector by implementing efficient and strong ICT policies in the country.

RECOMMENDATIONS

It is strongly recommended that government may play an active role in the implication of ICT aids in the teaching learning process at secondary level. Ministry of education has an obligatory function to provide special funds for department of education for the promotion of ICT at secondary level. It may also recommend that head teachers should have the vision to play a role of leader in providing the ICT devices from school funds.

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