

An Analysis of the Utility of IT Tools Provided by the Government in Public schools of Tehsil Gojra, Punjab, Pakistan

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Abstract

Education is a state of systematic instruction for the development of abilities and mental power. Teachers and students are the major elements of global educational system. In twentieth century technology play a vital role in the field of education. The present study has pointed out the value of modern technologies in the teaching learning process and to determine the utility of IT tools for students learning in the public schools. In govt sector there are many difficulties faced by the teachers and students in the use of IT tools like computers, Tablets and projectors. The concept of modern teaching is interactive and technology oriented. Modern teaching has necessary component of presenting ideas by students through group discussion, cooperative learning, open discussion and self-study which is included in this study to furnish the students' abilities in learning environment. All the Students and teachers of govt sector school were the population of this study. The target population was 15 Govt. high schools from tehsil Gojra was selected randomly through randomization.com. From the list of 126 schools 15 schools were selected through randomization.com. Two teachers and five students are randomly selected from each selected school. Total sample of the respondents was 30 teachers and 75 students from selected school. The sample of the study was consisted of 105 respondents. A well-developed interview schedule was used for the purpose of data collection. The collected data was analyzed by the using of computer software (SPSS) Statistical Package for Social Sciences.

Key words: Information Technology, Teaching, Learning Process, Quality education.

INTRODUCTION

Computers are used to provide up-to date information and learning strategies to make teaching learning environment improved. (Al-Gahtani, 2003). The proper utilization of technology in the classroom is the essential aspect of teacher's knowledge and capabilities. Teachers feel hesitate to operate the technical devices because they are not fully trained and experienced to operate the device. (Braak *et al.* 2004). Now society moves in 21st century where the education system has rapidly changed with the passage of time. Education is given with different modern IT tools which are helpful in teaching learning process i.e. LCDs and smart whiteboard. The education ministry is always trying to raise the standards of education in schools (Zazaleena, 2005). They always provide latest technology in schools to facilitate the students. With the passage of time usage of modern IT tools is being increased especially in the field of education (Honey, 2005). Many schools in the world use technology to increase the students learning tools like an internet access, email, interactive whiteboard, LCD, computers, multimedia projectors, laptop and course software that are according to the curriculum. (Passey, 2006). Many teachers just had basic information about using MS Word which is present in schools. Teachers also give permission to the students to use internet for their projects. Teachers use it as a tool to broad the spectrum of the students and to extend the potential of the students. (Scrimshaw, 2007).

Now more technological tools are present for students and teachers than ever before. It has positively impact on quality of education. But to get better results its implementation should be very accurate in every school and class (Tolstoy, 2008). Combination of ICT (Information Communication Technology) in education is in its primary stage. There are many problems in developing countries. The leading issues are high rate cost of operating, getting, maintaining and replacing ICT systems. The main issue is to use out of date hardware & software (Balasubramanian, 2009). In private schools usage of computer is more than the public schools. Latest technology

is provided in private schools to enhance the student's skills. Students of private schools are more active and creative because they use latest technology. If there are computer facilities in public schools there are no trained staff to run the system properly. The authorities must train their staff for the better utilization of IT tools in Public sectors to provide latest information (Bruh, 2009). The use of ICT in education creates creative thinking, logical reasoning, and higher producing efficiency among the students. ICT helps to improve the quality and quantity of education. It helps the students to learn new things, skills and help them to compete with world. Education becomes very affective with the use of computer, tablet, internet many more (Gursul, 2010).

Many countries spend the heavy amount of money to facilitate the schools with latest technology to improve the standard of education i.e. UK, USA, Australia, Italy and Turkey etc. In 2009 UK's education ministry has allocated the funds of interactive whiteboard (IWB) at primary and secondary level, they facilitate the students with latest technology because they think that it is a very effective way of providing quality education (Turel, 2011). Technology is playing an important role in our daily routine especially in educational sectors. Government provides latest technology in schools to improve the quality of education and to make the education easy and interesting for the students. (Wasif *et al.* 2011). Information technology has been providing its services in education field since 1990, it is a good way of learning. Education system can be improved through latest technologies (Hamidi and Meshkat 2011). Blackboard is the first innovative tool that is used in classroom as a teaching tool. It is also used as a traditional teaching tool (Costa, 2011).

Some teachers are not in its favour they think it is time consuming and they have not enough time to prepare the lectures by using power point slides. Teachers have some genuine reasons for not using IWB in the classroom that they have not enough time to layout the instructional lessons and lack of training to use the new technology (Moreira 2011). Interactive whiteboard is the second innovative tool that is introduced by Turkey. Blackboards played their role in 19th and 20th century while interactive whiteboards (IWB) are playing their role in 21st century. Firstly, people used smart boards in business after they came in education field and being used in schools for learning (Klimova, 2012). Teachers must develop technical

knowledge and skills to run the system in class and also try to understand the technical functions how to properly operate them. Teachers face different difficulties in using modern technology because they are not fully trained so they become nervous. When system creates hurdles (Abdullah-Al-Mamun, 2012).

The smart board is being used as an effective tool in schools to enhance the student's capabilities because it is computer based technology. It has a capacity to record the previous lectures and students also highlight their important points (Eady, 2013). Technology is currently used in education sectors. Teachers used this self-governed learning and try to motivate their own techniques and they also boost their learning experiences through technology and enhance their skills (Liu, 2014). Teachers used technology to improve their teaching strategy, through this they can easily communicate in the classroom. In remote areas of Pakistan ICT in education is neglected. Government should take steps on it. CAI (computer assisted learning) based learning helps the students to learn themselves and make them able to compete with other students in the world. In this way students can be responsible members of the society (UNESCO, 2014). Technology is also helpful for students to increase their learning while the usage of technology in the classroom becomes student's active learner. It has effectively worked on both teachers and students life it also develops self-confidence in both of them. (Bhalla, 2015).

IT tools are necessary for the student's educational learning in schools. ICT tools are being used in education sectors for the betterment of teachers and teaching skills. The interactive whiteboards are served their services in classrooms to assist teaching performance and support the teachers to flourish their teaching strategy (Bakdam, 2015). Different technologies, especially tablet is used to enhance the student's skills and try to change their learning attitudes. The use of tablet at primary level increases the student's interest in education and keep them busy in different activities (Kim, 2015).

Interactive whiteboard is being used as instructional tool in today's classroom to enhance the teaching and learning process. The IWB had been established by British Educational Communication Technology Agency (BECTA) in 2003, its features are very interesting, easy and touchable that can be used to show different images through

computer onto the board. It can be operated directly by finger touch to the board and also through a specific pen that is only used to operate it(Bakadam,2015).The schools tablets are used for the assessment of the students and teachers. It is very easy way to assess the students' performance through this device. Teachers have to record everything on the computers and send the whole details to the higher authorities.(Zhang and Deng 2017). The attendance of the students and teachers is also recorded on the tablets. EDOs are visiting the schools to have the overview of school performance (Molenaar,2017)

Computer based technology plays a vital role in the student's life. Many students who cannot learn properly from traditional method because they have some fitness problems. Due to unfitness, they feel shy in the classroom to show their skills and participation in the classroom because the classroom environment is typical. That's why those students are little bit ignored. Computer has raised the development of advanced devices. The computer technology also supports the students in the classroom with their special needs (Hasselbring , 2017).

OBJECTIVES OF THE STUDY

To determine the utility of IT tools for students learning in the public schools and identify the difficulties faced by the teachers and the students in use of IT tools in education sector.

STUDY AREA

The present study entitled "An Analysis of the Utility of IT tools provided by the Govt in Public schools of Tehsil Gojra-Pakistan" was conducted in public schools of Gojra. This study was conducted in public schools of tehsil Gojra to analyses the utility of IT tools. This research also helpful as a project for making better utilization of IT tools in public schools which are quite important. This research also helpful as a project for making better utilization of IT tools in public schools which are quite important. Public schools are the main key elements of Pakistan's economy which are facing various issues. Gojra a tehsil of Toba Tek Singh, has produced 112 international players to the national hockey team. They played international matches, tournaments and Olympic games as well. Data was collected

from fifteen (15) public schools. All teachers and students of public schools were the population of the study.

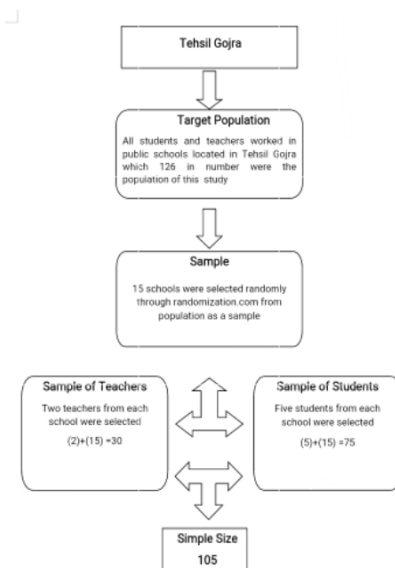
Figure 1: Map of study area



Source: Google search map www.googlesearchmap.com.

MATERIAL AND METHODS

Figure 2: Methodology flow chart



Data and its resources

The study was descriptive in its nature. Descriptive research is being used in the current scenario.

Descriptive survey designs are used in preliminary and exploratory studies to allow researchers to gather information,

summarize, present and interpret for the purpose of clarification. Quantitative research used to quantify the problems in numerical forms (Burn, 2003). Quantitative research used to decide the relationship between independent and dependent variables. Simple random sampling technique was used for the selection of sample for the study. The collected data was analysed by the using of computer software (SPSS) Statistical Package for Social Sciences.

Methodology

The whole teachers and students are worked in public schools and involved in teaching taught process. The target population was 15 Govt. high schools from tehsil Gojra. From the list of 126 school a sample size of 15 schools were selected through randomization.com. Two teachers and five students are randomly selected from each selected school. Total sample of the respondents was 30 teachers and 75 students from selected school. The sample of the study was consisted of 105 respondents. Sample was selected through random sampling technique. Sampling techniques are those techniques which are used for the selecting of sample from the target population. A well-developed interview schedule were designed keeping in view the nature and objectives of the study for data collection. The interview schedule consist on following two sections.

- Determine the utility of IT tools for students learning
- Identify the difficulties faced by the teachers and students

RESULTS AND DISCUSSION

Table: 1) To determine the utility of IT tools for students learning in the public school

a) Basic Computer Lab

Basic Computer Lab	Yes		NO	
	<i>f</i>	%	<i>F</i>	%
Does the computer lab facility is available in your school?	75	100.0	-	-
Does all the computers are worked in computer lab?	48	64.0	27	36.0
Generator/ups facility is available in computer lab	72	96.0	3	4.0
Internet facility is available in computer lab	75	100.0	-	-
Anytime to go to computer lab	9	12.0	66	88.0

Findings of Basic Computer Lab

Majority of the respondents (100.0%) agreed that computer lab facility was available in every public school. A single room should construct for computer lab in schools, where the learners come to collect new information related their work by the use of this technology. The construction of computer labs in schools should be the important step for the learners to develop their learning skills. Learners should try to enhance their knowledge through this technology. Most of the respondents (64.0%) agreed that all the computers worked properly in computer lab but some respondents (36.0%) agreed that all computers did not properly work in computer lab. A huge majority (96.0%) of the respondent agreed that generator/ups facility was available in school while only (4.0%) of the respondent agreed that there was no facility. Majority of the respondents (100.0%) agreed that internet facility was available in computer lab. Some respondents (12.0%) agreed that they were allowed anytime to go computer lab while majority respondents (88.0%) agreed that they were not allowed to any time to go to computer lab.

Table : 1.1 (b) Computer

Computer	Yes		No		Often	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
Teacher uses computer for teaching	27	90.0	3	10.0	-	-
Students have basic information about computer	30	100.0	-	-	-	-
Computer expert teacher is available in school	23	76.7	7	23.3	-	-
Computer is used for activities	22	73.3	3	10.0	5	16.7
Computer helps the teacher in teaching	30	100.0	-	-	-	-

Findings of the use of Computer

The majority (100.0%) of the respondents agreed that the favour of that the students have basic information about computer. Computer is a major tool for the learners judgment. It helps in improved students learning. Teachers feels that technology is more affective for their teaching and learning process. Mostly teachers used this technology as a helping tool but some pupil are not in its favour. Majority of the respondents (90.0%) agreed that the teachers used computer for teaching. Some (10.0%) respondents agreed that teachers not used computer for teaching and Most (76.7%) respondents agreed that computer experts available in school and some (23.3%) respondents agreed that computer experts not available. Majority of

the(73.3%) respondents agreed that computer is used for activities only but some (10.0%) respondents agreed that computers did not used (16.7%) respondents agreed that the computer was ofently used for teaching (100.0%)agreed that computer is helpful for teaching.

Table :1.2 (c) LCD Screens

LCD Screens	Yes		NO		Often	
	<i>f</i>	%	<i>f</i>	%	<i>F</i>	%
	Does LCD is available in your school	25	83.3	5	16.7	-
Does LCD is used for teaching	22	73.3	8	26.7	-	-
Does students get effective learning through LCD	26	86.7	4	13.3	-	-
For the correct pronunciation of students the audio, video clips are shown	21	70.0	6	20.0	3	10.0

Findings of The use of LCD Screens

Table reveals that (70.0%) of the respondents agreed that LCD is used for the rhythms, correct pronunciation of students only (10.0%)agreed that LCD audio video clips are often shown for correct pronunciation of the students. For providing the high quality of education ICT is being used as a powerful tool. Modern technology is effectively worked for students learning. In table (83.3%) of the respondent agreed that LCD is available in schools. Some respondents(16.7%) agreed that did not available in schools. Majority of the respondents (73.3%)agreed that it is used for teaching but some(26.7%) of the respondents agreed that not use for teaching. Majority of the respondents (86.7%) agreed that through LCD students effectively learn while few respondents 13.3% not in favor.

Table: 1.3(d) Tablet

Tablet	Yes		NO	
	<i>f</i>	%	<i>f</i>	%
Tablet facility is available in school	29	96.7	1	3.3
Does LND preparation is done	30	100.0	-	-
Through tablet student learn with interest	30	100.0	-	-

Findings of the use of Tablet

This majority (100.0%) of the respondents agreed that the students learn with interest through tablet. A person can learn through his/her own perception. At the time to make children successful in life it is

compulsory to polish the children at school level. Children easily learn through smart technologies and get information only a single touch. Tablet is an interesting and beneficial tool for students learning. Majority (96.7%) of the respondent's agreed that tablet facility is available in schools while few respondents (3.3%)agreed that tablet is not available in schools. Majority of the respondents (100.0%)agreed that LND preparation is done on tablet.

Table : 1.4(e) Multimedia projector

Multimedia projector	Yes		NO	
	<i>f</i>	%	<i>f</i>	%
Does the multimedia facility in school	22	73.3	8	26.7
Does teachers use multimedia in class	11	36.7	19	63.3
Students learn with more concentration	18	60.0	12	40.0
Teachers can gain their educational objectives easily	28	93.3	2	6.7
Teachers and students both remain active in class	28	93.3	2	6.7

Findings of the use of Multi Media projectors

The majority (93.3%) of the respondent agreed that the teacher and student both remain active in class while som respondents (6.7%) did not agreed with the statement. The Usage of multimedia built the student learning ability. In multimedia information is given in the form of graphs, test, etc according to the content form of multimedia setting. Majoritty of the respondents (73.3%)agreed that tha multimedia available in school whhile some(26.7%)reesponndents not agreed with it.Some respondents (36.7%)agreed that multimedia use in class while majority (63.3%)were agreed that multimedia is not used in class for teaching.Majority of the respondents (60.0%)agreed that tha students learn with more concentration but some (40.0%) not agree with the statement.A huge majority (93.3%) of the respondents agreed that the teachers gain educational objectives easily but some(6.7%) not agree with the statment.

Table :2) To identify the difficulties faced by the teachers and students in the use of ITtools

a) Difficulties

Difficulties	Yes		NO	
	<i>f</i>	%	<i>f</i>	%
Does any IT expert teacher is available in school	27	90.0	3	10.0
Does any technician is available in school to overcome the problem faced in usage of technology	24	80.0	6	20.0
Does any faculty staff is available to operate computer	18	60.0	12	40.0
Due to insufficient quantity of computers in computer lab it's very hard to control the big class	25	83.3	5	16.7
Extra use of computer, tablet badly effect students eye sight	25	83.3	5	16.7

Findings of the Difficulties Faces by the Teachers

The presented data in the above table a huge majority (90.0%) of the respondents were agreed that IT expert teacher is available in school while a less ((10.0%) of the respondents agreed that IT expert is not available. Majority (80.0%) of the respondents agreed that technician is available in school to handle the problems and 20.0% did not agreed with the statement. Most(60.0%) of the respondents agreed that faculty staff is available in school to operate computer a number of respondents (40.0%)agreed that staff is not available in school to operate computer. Majority (83.3%)of the respondents were agreed that due to insufficient quantity of computers it is very difficult to handle the big class and only (16.7%)agreed that they have no problem to handle the big class in case of less computers. Majority (83.3%) of the respondents agreed that eye sight is badly effect due to the extra use of technology while (16.7%) of the respondents did not agreed with the statement.

CONCLUSION

According to the paper, researcher identified the difficulties faced by the teachers and the students in use of IT tools in education sector. The effectiveness of qualified and trained professional teachers could be further enhanced by equipping them with the necessary tools inside and outside of the classroom. Governments and employers in the education sector must invest in more infrastructure and tools to

make education a national priority without which equal opportunity for all citizens remains a mirage. The changing role of education is currently being reinforced with the integration of multimedia technology and this has led a new paradigm in education and the evolution of new concepts in content development and a number of innovative methods in which information can be communicated to the learner. In conjunction with the study of usefulness multimedia in different educational scenarios, the important point for future research is that the time to come will surely promise the availability of multimedia technology to one and all, but its usage should be limited to and in consideration with its pedagogical strengths, also given high importance of multimedia from different fields of researchers backgrounds, divers view-points, and varying procedural methods. Hence the multimedia community seems to be the perfect platform for bringing all those researchers and educators with different backgrounds together in order to improve multimedia based education and therefore teaching and learning in general.

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