UNIVERSITY TEACHERS' ATTITUDE AND ABILITY TOWARDS THE PRACTICE OF USING COMPUTER TECHNOLOGY IN CLASSROOMS WITH SPECIAL FOCUS ON PAKISTAN

Dr Ghulam Rasool Memon

ABSTRACT

The information and computer technology (ICT) play an important role in facilitating the teachers in the delivery of lectures in the classrooms. It is very easily available and useful in the higher educational institutions of Pakistan. It provides more options and flexibility to both teachers as well as students in teaching and learning process. It is a fact that computer usage has appeared at all levels in the very recent times with the increasing number of users. Therefore, the quality of using this technique is the very important factor for the development of the teachers. Teachers are considered as the most important agents of change on the educational process. Thus, the students in general expect from teachers to use ICT tools inside classroom. In this paper an attempt has been made to review the theoretical literature related to the usage of information and computer technology (ICT) in the classrooms. Teachers' attitude towards the using information and computer technology (ICT) will be objectively analyzed. The paper mostly consists of the readings and researches conducted outside Pakistan but slight touches are

incorporated on the role of ICT in ushering a new era at the higher education institutions in Pakistan.

INTRODUCTION

Education plays a key role in bringing socio-economic change in the society. It polishes the personality and helps to bring out the hidden abilities. It helps to learn the various mechanisms and skills necessary in providing and guarantying the decent livelihood (Aggarwal, 2005). In 1947, when Pakistan came into existence, the first educational conference presided over by Muhammad Ali Jinnah was held in Karachi after a year in 1948 to find out the ways of education for the newly established Muslim country. In the different sessions of the conference, many practical decisions were taken to endorse the Muslim philosophy of education in Pakistan within different phases. Subsequently different educational policies were announced to meet the needs of the day. Regrettably, the most wanted consequences are still seems a far cry to be achieved (Naseem, 1990).

The computers are considered as the vehicle of socio-economical change in the modern technological era. They are frequently used in schools, colleges, universities, hotels, shopping malls, and in various businesses. Without using the computers life looks miserable in this age of technological revolution.

Likewise, the computers are being used in synthesizing the database of various researches conducted at higher education institutions. They have made revolution in student learning with full enthusiasm inside the classrooms (Becker, 1991; Miller & Olson, 1994). Chen (2004) is of the opinion that the emergence of computers and information systems no doubt computer is the biggest single impact factor which has totally changed the prevalent education system in almost all over the world. Using the computer technology is considered and recognized as a significant strategy preparing the young for the 21st century (ISTE, 2006). In a research Drenoyianni and Selwood (1998) noted that by using the computer technology as a support in teaching has ended the practice of rote-memorization, rigid curricula, and teacher-centered instruction. In this way it has helped a lot to make the class atmosphere friendly towards students as well for the instructors.

Literature supports the idea that in the implementation of systemic educational reforms the overall attitude of teacher plays a crucial role in shaping the success or failure of innovative curriculum (Hargreaves, 1994; Sarason, 1991). Pelgrum (2001) is of the opinion that much depends on the attitude of teacher in mobilizing the students towards change on the instructive work floor. If we analyze the social context of a teacher within the classroom or outside the university it has been observed that a teacher is found much influenced by new technologies (Bridget &

Niki, 1997). Bridget & Niki (1997) noted that teachers are the part and parcel of the society. They themselves see and feel that society has become information intensive. They realize that a teacher is on the driving seat in managing the learning process. Therefore, automatically the role of teachers has got changed drastically.

ADVANTAGES OF COMPUTER TECHNOLOGY

There are a lot of advantages of using computer technology in higher educational institutions. It has played an important role in teaching and learning process. It is advantageous to both teachers and students alike. ICT has provided more options and flexibility for both teachers and students. For example, Pakistan is a developing country. It can not be compared with technological developed countries of the world. The education standard of Pakistan is steadily going to the right direction. Since last decade efforts are on the way taking the full advantage of the technology. As a result, the bulk of universities, and advanced research institutions are being deeply affected by ICT tools in general and computer technology in particular at all levels.

Pakistan has invested a huge amount of money on the purchase of ICT tools. It is widely believed that without the use of ICT, Pakistanis, as a nation can not progress at par with its neighbouring countries. Therefore, a remarkable amount of the university budget in Pakistan is usually spent on the ICT

machinery purchasing. The huge number of computers is available at every university in Pakistan. It is widely believed among the administrators and teachers that technology has a vital role to play as tools for teaching and learning across most aspects of the academic curriculum.

There is a need to learn computer technology. Soine (1996) declared that the employers are usually interested to employ those employees who are well aware of the tools and techniques of using computers. Therefore, if the universities could not teach their students computer technology surely those universities will loose the market value because their graduates will be in great trouble when they will enter into the market in the search of the employment. Hence, integrating computers into conventional non-computer classrooms is necessary for the achievement of students and future employees. According to Means (1997) information & computer technology has a bright future in making the most necessary educational reforms in teaching and learning equally. Whereas, Ng'ambi and Brown (2004) are of the opinion that computer technology does add value to teaching and learning. Computer technology can reshape and revitalize the traditional method of teaching and learning. It encourages the students to be more dynamic and answerable for what they study and in such a way improves student performance (Abu-Rmaileh & Hamdan, 2006).

Integrating computer technology in supportive learning classrooms has been revealed to encourage students' educational accomplishment, inspiration for learning activities, self-esteem and regular participation. Means (1997) stated that the use of technology makes easy to control the students in the classroom. The universities that can educate the skills necessary to interpret the mass of information available through computer technology will help get better student learning on the whole and provide students with skills that prepare them for life after university and a future of change (Wilmore, 2001). Whereas; if the teachers are not using the computer technology they are probably not doing justice because they are ignoring the important side of the students' study (Cummings, 1998).

Computer technology has changed the mode of teaching and learning totally. The universities as the highest place of learning have got its direct impact because computer technology has become an everyday part of students' lives. Murphy (1995) summarizes the following learning outcomes that result from the use of computers in classroom:

- Social growth
- Problem solving
- Peer teaching
- Independent work
- Exploration.

TEACHER ATTITUDE TOWARDS COMPUTER TECHNOLOGY

Jobe et.al (1996) in a research study on teacher attitudes and inclusion, concluded that teacher attitude plays a vital role in the success of any program in education, especially the practice of inclusion. Scruggs and Mastropieri (1996) in another study on the same theme remarked that the perceptions and attitudes of general education teachers towards inclusive practices may affect the academic environment of the educational institutions. Attitudes can be considered both the determinants and consequences of learning experiences (Davies & Brember, 2001). On the other hand, in several theories on the attitude of teachers theorists believe a strong relationship between attitude and behaviour. For instance, Ajzen and Fishbein (1980) is of the view that attitude influences behaviour not directly but by guiding the development of behavioural meanings, which themselves prompt behaviour.

Therefore, before introducing the computer technology in the educational institutions there is a need to monitor teachers' attitudes towards ICT. Teachers have to play an important role in the implementation and usage of ICT. It is noteworthy that teachers' attitude should be monitored especially in the developing countries of the world because in those countries computer technology is not usually a part of their educational environment (Albirini, 2004). In several other studies (i.e. Abas, 1995; Isleem, 2003; Almusalam, 2001) it has been noted that

teachers' attitudes towards computers is directly proportional with the use of computers in the class.

Computer technology in education as mentioned in different researchers one can say without mincing the words that it is actually a technique of teaching and learning, and expanding educational results, and with the purpose of making the arguments easy. It is the need of hour that teachers should be trained in ICT for their academic development to increase their self-confidence, skills, and knowledge to integrate computer technology into their daily practice (e.g. Albirini, 2004; 1987; Ajlouni, 2006; Watson, 1998; Woodrow, 1992).

Almost all the researches conducted on this research theme suggest that technology has many latent benefits for teachers, students and the universities alike. Likewise, victory in integrating ICT depends significantly on the adequate teachers training programs, attitudes, experience, knowledge and technical support. The role of teacher in implementing the computer technology programs in the education sector is very important. In the views of Al-Jabri and Al-Khaldi (1997) positive attitude is developed with the use computers. Therefore, the adequate use of computers results in the development of positive attitudes. It is a source of relaxation removing the anxiety about the present or future use of computers. The act will reward to confidence and positive attitudes towards computers, and that

confidence and attitudes would positively, and simultaneously, affect one another (Tamar & Smadar, 1998).

In normal circumstances it much depends on the teachers when, where, and how to use the computer technology in the class. Baylor and Ritchie (2002) states that regardless of the benefits and sophistication of the technology it will not be used until and unless faculty members have the skills, knowledge and attitudes necessary to infuse it into the curriculum. Watson (1998) hints that the growth of teachers' affirmative attitudes to ICT is a basic element for increasing computer integration and keeping away from teachers' reluctance to using the computers.

Consequently, the effects of constructive attitude of teachers towards the computer technology are quite visible. The argument is accepted and supported by all the researchers as an essential part for valuable utility of computer technology in the learning process (Bozionelos, 2001; Fisher, 1999). Fisher (1999) in his study found that teachers' attitudes were strongly related to their success in using technology. It is widely believed in academic circles that teachers' attitude towards ICT is just like a filter through which all learning occurs after getting filtered. Additionally, developing positive attitudes towards using ICT will be a main objective for raising the efficiency of teachers.

In a research study Bozionelos (2001) found that those people who have great exposure to computer technology develop a

more positive attitude than the others. Offering incentives and providing opportunities to teachers to become at ease with computer technology will direct to positive attitudes and, for this reason, prepare teachers for a virtual learning environment. Actually, some researchers have remarked that teachers' attitudes toward technology may decide their execution of any computer skills they obtain (Woodrow, 1992).

Basic know-how about the computer technology is pre-requisite for the effective teaching in the class room. It is to be noted that any effort to put into practice computers in education would need to concentrate on teachers' attitudes toward computers as a privilege for its achievement. Mitra and Steffensmeier (2000) opined that a networked learning institution where students have easy right to use computers could encourage optimistic attitudes on the way to the make use of computers in teaching and learning. They found that a computer-enriched education milieu was completely correlated with students' attitudes towards computers in general, and the part of computers in facilitating teaching and learning. Guthrie and Richardson (1995) agree that teachers who work with computer technology need support from other faculty members.

CONCLUSION

In a nutshell, various research studies conducted on computer technology as supportive in teaching and learning have concluded confidently that the use of computer technology is a

helpful agent for teaching in the class helps to make better the teachers' performance and students learning results. The above description makes it very much clear that computer technology can lead teachers gaining effective and valued instructional practices to make easy of the learning process in the classrooms. It is a general consensus among the educationists and policy-makers that when computer technology is introduced in the educational system, it might present a huge contribution not only to the process of teaching and learning, but to improve students' grades too.

Computer technology is considered one of the powerful techniques for enhancing the capability and efficiency of the educational institutions, teaching community, and students as well. When it is introduced and applied in the teaching the practices of rote-memorization, rigid curricula, and teacher-centered training method will be stimulated into a more student-centered milieu where learners are able to manage their own learning. By using computer technology in cooperative learning classrooms it will help students to improve their grades, enthusiasm for learning, and above all the self-confidence. It stimulates the students to be more active and responsible for what they learn in their schools. As a result, students enhance their performance, and make them serious in their learning. Teachers' approach plays a crucial position in the achievement of the practice of inclusion. It may manipulate school learning environments and equal learning opportunities for students with

disabilities. Nevertheless, positive teacher attitudes toward computers and computing skills are indispensable part for successful use of computer technology in the learning process.

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