The Effects of Using Educational Technology in Private Secondary Schools of Karachi, Pakistan

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Abstract

This study shows the effects of using educational technology in private secondary school of Karachi. This study was done through survey. The population of this study was consisting on both students and teachers of private secondary school. One hundred respondents including 30 teachers and 70 students were randomly selected. The questionnaire was used consisting of 24 items as a research instruments. Simple percentage method and simple mean methods were used for analyzing the collected data. The survey result shows that both of students and teachers taking interest in using towards educational technology at secondary level. After the conclusion of the results it was recommended that Government and private institutions should arrange seminars and workshops to aware students about the importance of educational technology and there should be some introduction courses to aware teachers about educational technology.

Keywords: Secondary level, educational technology, effects, teachers, students, audio visual aids, computer, projector.

Introduction

The improvement of a country can be achieved fully, if education system is developed to meet the demand of the future. Education is the basic tool for the development of individuals in a society, by providing them the knowledge to understand and participate in day-to-day activities, ultimately preparing a nation for facing challenges at regional, national and global level. Education can be divided into formal, semi-informal and informal system. Formal education can be further subdivided into primary, higher and secondary education. In these different education systems, a teacher plays an important role by using a variety of methods taking into account the differences among the individuals. Full potential of the educational system can be utilized by manipulating different elements such as science and technology, new methods of communications, while keeping in view the socio-economic situation of the

country. Teaching can be made more effective and efficient by utilization of different tools of educational technology. According to Richey (2008) educational technology is the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources and aids to improve the progress of human learning. Educational technology is aimed to develop capability of students by improving students' attitude, enthusiasm and engagement, classroom content and improved student's retention. According to Tahir Hamid (2006) a formal definition of IT terms it as a broad subject concerned with technology and other aspects of managing and processing information and that it deals with the use of electronic computers and computer software to convert, store, protect, process, transmit, and retrieve information1. The term Information and Communication Technologies (ICT) was coined to reflect the seamless convergence of digital processing and telecommunications.

There are many benefits of educational technology. Among these are the easy-to-access course materials, motivation of the student by instant feedback, improvement in the writing skill, easiness in understanding the specific subject and the most important one is the more amenable structure to measure the outcomes and improvement in monitoring and maintenance of students' records. Many computer and non-computer based technologies are currently in use in traditional class rooms, which include: computer in the classroom, class websites, class blogs and wikis, wireless classroom microphones, mobile devices (clickers or smartphones), smartboards (Interactive whiteboard providing touch control of computer applications) and online media (The Journal, 2002).

There is a lot of development in educational technologies all over the world but such technologies are scarce in country. Although at higher level of education one can see some advancement but at secondary school level, it seems to be rare.

Objectives Of The Study

- To highlight the importance of educational technology.
- To explore the merits of using educational technology at all levels of education especially secondary level.
- To evaluate the after effects of using educational technology.
- To know that how much educational technology increases the mental ability of secondary level students.
- To explore that how much educational technology helps in the betterment of the teaching and learning process.
- To know that whether educational technology helps students in the selection of occupation or not.
- To know whether educational technology damage students practical abilities or not.

Review Of Related Literature

Secondary education is a short time period in the life of every educated person and it is now being recognized as the middle stone of educational system in this century. According to D.S.Srivastava (2005) secondary education plays an important key role in social economical and human development in the countries around the world. It helps to create a broad and bright future in individual and nations life. It depends on the teaching methods of secondary level. As P.V.V.Sataya Narayana (2004) said that teachers use different teaching methods at secondary level like lectures, discussion, questioning, assignments, and field trips. The educational technology is most commonly used in project method and in field trips. G.O.M.Leith (2003) clears that educational technology is application of scientific knowledge about learning and the conditions of learning to improve effectiveness and efficiency of teaching and learning. Educational technology in way could be traced back to the emergence of early tools and painting on cave walls. But usually its history is made to start with educational firm **(**1900s**)** or Sidney Plessey's mechanical teaching machines in the **1920.** Models based on these designs were usually referred to as computer based training, computer aided instruction in the **1970'S** through the **1990'S**. In a more simplified form they correspond to today's **"e-contents"** that often form the core of **"e-learning"** setups, sometimes also referred to as web based training or e instructions. The course designer divides learning contents into smaller chunks of text augmented with graphics and multimedia presentation. The **1980's** and **1990's** produced a variety of schools that can be put under the umbrella of the label computer based learning. Frequently based on constructivist and cognitive learning theories, these environments focused on teaching both abstract and domain special problem solving. The **2000's** emergence of multiple mobile and ubiquitous technologies gave a new impulse to situated learning theories favoring learning-in-context scenarios. Educational technology is a system in education in which machines; materials, media, men and methods are inter-related and work together for the fulfillment of specific educational objective. There are different types of educational technology; most important are PowerPoint presentations, calculator smart board, computer, TV and internet. It effects positively on students' learning. It develops interest and curiosity among the students. It provides not only theoretical knowledge to the students but also make them professionally skilled in subject by providing practical knowledge. Through educational technology, students become aware of their social status by keeping themselves up-to-date and can solve their problems by sitting together. Moreover, educational technology promotes creativity and provides entertainment to students. In this way they can gain lecture effectively and teacher can also deliver their lecture in a better way. The term **"technology"** can be used to mean a very vide variety of things from computer to pencil. Student uses the technology as a source to help them develop higher order thinking, creativity, research skills and so on. Educational technology can be effective in teaching base skills. There are so many effects which can be led on the students of secondary level. They are:

- When students understand what they are taught, their interest develops. This improves school attendance, decrease drop out rates. In technology, rich classroom, students become more engaged and more active learner.

- Technology is convenient for students to edit their written work on word processors, which can improve the quality of their writing.
- Educational technologies are modern tools and effected positively on students and create curiosity towards learning.
- Educational technologies are interesting tools for student and student feel happiness and get satisfaction, when they use it.
- Educational technology broad their vision and it improves their skills and performances.
- Education technology not only provides theoretical education to the students but also make them professionally skills in subject by providing practical knowledge.
- Educational technology helps in the betterment of the teaching process and enables teachers to use more varied, rich and motivating programs through different media.
- Educational technology save time and energy, by using word processor, they compose and edit their documents very easily as compared to manual work.
- Through educational technology, students aware about new technologies and he also aware about new profession throughout the world, which help students in future life and they get better social status in society.
- Educational technology use as a tool for solving problems. Students usually spend time in doing calculation and creating strategies for solving complex problem and develop a deep understanding of the subject matter.
- Educational technology keep students up-to-date, with internet a student can have access to libraries many times more extensive than libraries in their schools and can get advantage of information.
- Educational technology does not only provide information but also entertain students. Through television students get useful information plus entertainment by seeing animation programs.
- Students use multimedia to learn interactively and work class projects. The new technologies allow students to think analytically and critically and to work collaborate.

Methodology

This study depended on quantitative research, based on survey. It is a comprehensive analysis of academic performance of 8 private secondary schools of Karachi. The following factors noteworthy concerning the analysis.

- The geographical areas of study were 02 towns of Karachi city.
- Within these geographical limits, private secondary schools were selected for the collection of data and analysis.
- A total number of 8 schools were selected for study using the list of schools provided by the board of secondary education Karachi.
- The sample consisted of 70 students and 30 teachers. The total numbers of respondents were one hundred.

Results

The collected data was converted into tables. Findings and conclusions were drawn in the light of these tables by the researchers.
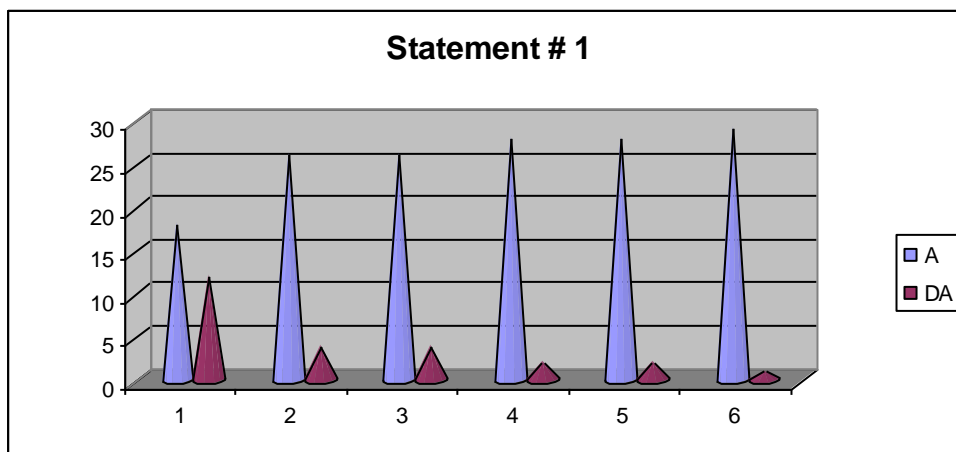
Table 1:

The first table shows the ideas of teachers that how much educational technology is helpful in effective learning.

S.No	Statement # 1 Importance of E.T in effective learning	A	DA	Mean
1	Attendance ratio of students is increased	18	12	13.33
2	E.T makes lecture more meaningful	26	04	8.89
3	Provide communication skills to the students	26	04	8.89
4	Make subject easier for students	28	02	7.78
5	Prove helpful in saving time	28	02	7.78
6	Give information about modern development in education	29	01	7.22

The collected data is further statistically analyzed by Mean which shows that according to the majority of teachers the attendance ratio of students is increased through educational technology as well as it also make the lecture more meaningful, provide communication skill to students, makes subject easier for them, helpful in saving time and give information about modern development in education.

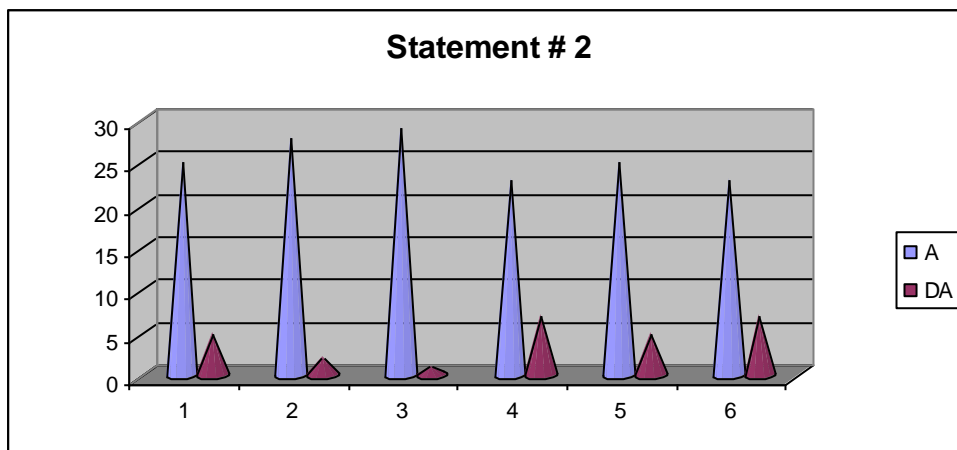The visual representation of data is given below through graph.

Table 2:

The second table shows the ideas of teachers that how much educational technology enhances the hidden abilities of students.

S.No	Statement # 2 Importance of E.T in enhancing the abilities	A	DA	Mean
1	Ability of creativity is created by E.T	25	05	9.44
2	Able to get theoretical and practical knowledge	28	02	7.78
3	Increased intellectual abilities	29	01	7.22
4	Improved ability of self-concept	23	07	10.56
5	Enhanced hidden abilities	25	05	9.44
6	Develop ability of problem solving	23	07	10.56

The collected data is further statistically analyzed by Mean which shows that according to the majority of teachers educational technology develops ability of creativity among students. They also able to get practical knowledge, increased their intellectual abilities and self-concept, enhance hidden abilities and develop problem solving ability also.

The visual representation of data is given below through graph.
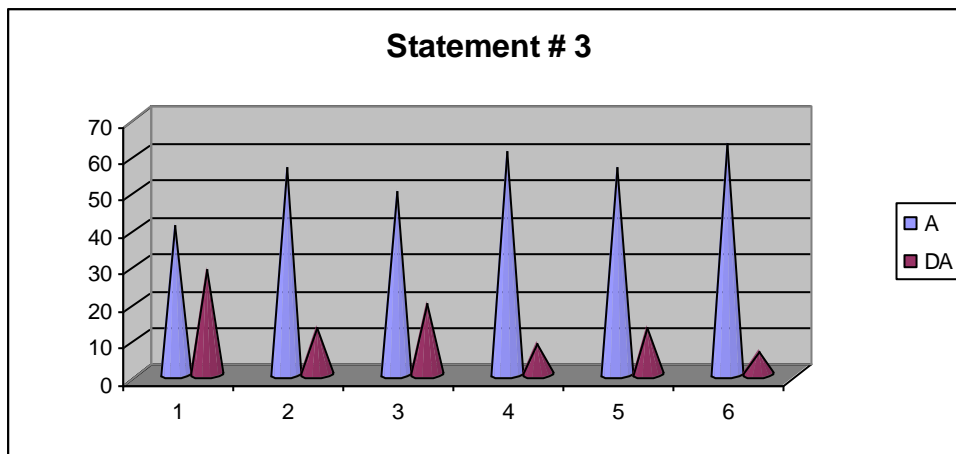
Table 3:
The third table shows the ideas of students that how much educational technology is helpful in effective learning.

S.No	Statement # 3 Importance of E.T in effective learning	A	DA	Mean
1	Attendance ratio of students is increased	41	29	31.67
2	E.T makes lecture more meaningful	57	13	22.78
3	Provide communication skills to the students	50	20	26.67
4	Make subject easier for students	61	09	20.56
5	Prove helpful in saving time	57	13	22.78
6	Give information about modern development in education	63	07	19.44

The collected data is further statistically analyzed by Mean which shows that the attendance ratio of students is increased through educational technology as well as it also make the lecture more meaningful, provide communication skill to students and makes subject easier for them, help in saving time and give information about modern development also.

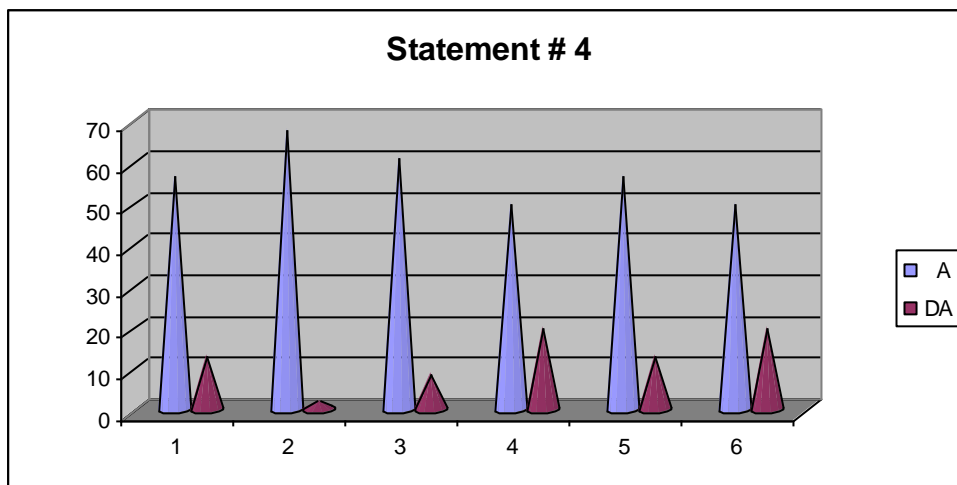The visual representation of data is given below through graph.

Statement # 3

Table 4:

The forth table shows the ideas of students that how much educational technology enhances the hidden abilities of them.

S.No	Statement # 4 Importance of E.T in enhancing the abilities	A	DA	Mean
1	Ability of creativity is developed through E.T	57	13	22.77
2	Able to get theoretical and practical knowledge	68	02	16.67
3	Increasing intellectual abilities	61	09	20.56
4	Improved ability of self-concept	50	20	26.67
5	Enhanced hidden abilities	57	13	22.78
6	Develop ability of problem solving	50	20	26.67

The collected data is further statistically analyzed by Mean which shows that educational technology develops ability of creativity among students. They also able to get practical knowledge, increased their intellectual abilities and self-concept, enhance hidden abilities and develop problem solving ability also.

The visual representation of data is given below through graph.

Conclusions

In entire educational stages the secondary level holds to much importance in the development of children. Modern researches prove that attractive teaching methods can leave long-lasting effects on the minds of children. Education technology is one of such methods. Findings of the study prove that majority of the teachers and students stated that by using educational technology, modern tools can effect positively on students and create curiosity towards learning.

Recommendations

- Government and private institutions should arrange seminars and workshops to aware students about the importance of educational technology.
- There should be some introduction courses to introduce teachers about educational technology. So, they can able to make their lecture effective and meaningful.
- The students who have creative mind and brilliant and cannot bear the expensive of educational technology should be provided scholarships to polish their abilities.
- Government and private schools administration should provide more and more occasions and facilities to use educational technology to the teachers. And it will be helpful for teachers as well as students in their studies.
- Educational technology should use in secondary classes, by this students can expert in technologies, which will be helpful for their upcoming life.

Acknowledgement

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