UTILISATION OF TECHNOLOGY AND ELECTRONIC MEDIA IN EDUCATION

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ABSTRACT

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The aim of the paper was to study the utilization of technology in education and to understand the role of electronic media as a technological innovation in education. The data was collected from 100 respondents i.e.50 students and 50 teachers by using random sampling technique. The findings of the study indicated that Technology has become an inevitable tool for modern education. It has helped in improving the tasks of teacher, facilitating the process of teaching and learning and enriching the aims of education. It is of great importance in the educational development of students. It has also been found that electronic media provides an opportunity to develop study habits among the students. It is essential in teaching-learning process. Respondents think that applications of electronic media are needed to bring about qualitative as well as quantitative changes in the field of education.

Keywords: Media, Technology and Learning Process.
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INTRODUCTION:

Considering the revolutionary changes which have taken place during the recent years, it is difficult to predict what the future holds for us. We can however, be certain that technology is going to play a major role in the formation of modern civilization and in aculturisation of the society. Day by day the increasing scientific and technological impact upon human life activities is developing the scientific attitude of the individuals in society. And in turn the society has begun to adopt the scientific and technological principles as well as to apply their results in every field of life with the intention to achieve a higher significance. Ropohl (1996) has defined technology as the science of technique, and technique as the skills and methods used by

technologists. Technological discoveries of 1980's like television, radio, programmed learning and a wide range of audio-visual aids have already brought out considerable changes and made profound impact on higher education. The introduction of technology and design education in the national curriculum of England and Wales (Eggleston, 1992) is an example of an attempt to establish a non-vocational technology education as an independent subject. The 1990's have seen the growth of commonly called new information and communication technologies such as telecommunications, computer and microelectronics. One of the greatest advantages offered by modern information and communication technology is the ability of instruction without the live presence of a teacher.

In the 40's and 50's words like "Teaching Aids" or "Audio-Visual Aids" had a definite meaning in India. But in the 50's with B.F. Skinners untiring efforts in the U.S.A the concept of programmed instruction and instructional technology travelled across the seven seas and touched the shores of India. Advancement in the field of technology has been a real blessing for education. Various media at the disposal of education have not only simplified the task of learning but have also reduced the boredom of learning things which may not have immediate application in life. Technology also brings variety in teaching methodology. Slides, film-strips, video software and computer programmes all can be effectively used to teach the distance learners. They have more or less the same effect as far as teaching is concerned. Technology helps the learner to learn actively. These technologies help students and teachers communicate (Levin 1992; Pea et al. 1994), explore phenomena (Linn 1996), find information (Wallace et al. 2000), conduct investigations (Rubin 1993), build models that provide explanations of phenomena (Jackson et al. 1996), develop products, and communicate with peers (Fishman 1996). Current research has demonstrated that the didactic, teacher-centered pedagogies common in U.S classrooms are ineffective when compared to more interactive (Aleven and Koedinger 2002; Buckley et al. 2004; Hake 1998), inquiry-based (Schneider et al. 2002; Shymansky et al. 1983), or collaborative approaches (Pelaez 2002; Ramaswamy et al. 2001; Rivard and Straw 2000).

Electronic Media, Radio, Television, Video and Computer are growingly becoming household necessities. As early as one should buy or borrow a book, citizens today rent video cassettes for feature films. With every passing day this media is becoming more powerful in performance, less and less expensive, smaller, simpler to use and portable. Today, T.V pervades the life of people in most nations; it has become a very powerful medium of information, education and entertainment. Radio and T.V are called the electronic media because they are electronically operated. Today, they are the supreme media or mass communication, leaving the other media far behind. Electronic media has unique importance in educational system. It has revolutionalized the lives of people in the world. It has played an important role in innovation and improvement in teaching methods, individualization of instruction and an effective learning system for large number of students. Electronic media provides learning environment in which students take active part in the learning process. It provides up-to-date information, modifications, new equipments and techniques to the teaching. Electronic media enlightens the students by providing useful knowledge in almost all the fields of life.

NEED AND IMPORTANCE:

The process of education is changing in the modern times. Various technological innovations are coming to the existence which exercises a greater influence on the methodology, curriculum as well as other teaching–learning relations. So the technological innovation has revolutionized the teaching-learning process. Education is becoming media oriented to meet the needs of advancing nations. Today, many countries around the world use some form of technological media in significant education. In a few countries, the use is fairly wide spread. Once technology enters the school building, dramatic renovations usually begin. With the technological magic touch, a simple school house turns into a systematized learning centre. Most technological devices and programs, however, are structured around the needs of the teacher and are employed as teaching aids in the classroom. Technology is catalyst for educational change. Its absence would make a difference to the educational

process because technology is an integral part of a well thought out system, not merely a teacher's aid. Keeping in view the above discussion, the investigator felt the need of taking the problem "Utilisation of Technology and Electronic Media in Education".

OBJECTIVES:

1. To analyze the actual utilization of technology in education.

2. To understand the role of electronic media as a technological innovation in education.

METHODOLOGY:

Generation of scale items-

The statement of the self designed questionnaire was finalized after reviewing the existing literature and extensive discussion with the experts. Self designed questionnaire comprised two sections. Section A comprised six statements which are related to the information like the use of T.V., Cable, Telephone and Internet. Section B of the questionnaire comprised ten statements which are related to the utilization of technology in education.

Sampling -

The sample of the study comprised of 100 respondents i.e. 50 students and 50 teachers. The sample taken consisted of educational institutions. Random sampling technique was used to approach the concerned teachers and students.

Tool Employed-

In the present study Self-designed questionnaire was administered on the selected sample. The questionnaire was prepared as per the requirements of the study and concretised on the basis of existing literature and ongoing practices. The respondents were personally contacted and they were explained the reason for the research. All the respondents responded properly. Hence, the response rate came 100 percent. All the respondents participated voluntarily.

Statistical Technique Employed-

In the present study, the investigator used a very simple statistical technique for the analysis of the data which is called as "calculation of frequencies" in which, firstly tallies

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were ticked while working out the frequencies in the rough work, the investigator found out the frequencies of each type of responses given to every item no. gathering specific information from educational institutions made in the questionnaire.

After calculation of frequencies the investigator calculated the percentage of these frequencies of each item by "calculation of percentages".

Table   1

Section A			
Item No.	Yes N=100	No	Percentage=100
1 (a)	100	0	100
(b)	78	22	78
2	73	27	73
3	15	85	15
4 (a)	55	45	55
(b)	42	58	42
(c)	37	63	37
5	47	53	47
6 (a)	45	55	45
(b)	75	25	75

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Table 2

Section B			
Item No.	Yes N=100	No	Percentage=100
1	99	1	99
2	98	2	98
3	99	1	99
4	99	1	99
5	99	1	99
6	99	1	99
7	89	11	89
8	27	73	27
9	37	63	37
10	50	50	50

FINDINGS AND INTERPRETATIONS:

Section A

Results revealed that hundred percent respondents are using the T.V. facilities and seventy eight percent respondents have cable connections. Seventy three percent respondents have telephone connections and only fifteen percent respondents are using the internet facility. Fifty five percent respondents are aware of integrated optical fibre services. About fifty

percent respondents know that four or five T.V. connections would require an initial investment of Rs 12000 for the purchase of modem shareable among four to five households. Forty five percent respondents want to work out their present expenses for T.V., Telephone and Internet.

Section B

Majority of the respondents (99%) reported that electronic media has brought many changes in their educational system. They (99%) agreed that electronic media provides an opportunity to develop study habits among the students, and is also very helpful in supplementing and enriching the classroom instruction. Further ninety nine percent respondents indicated that electronic media is essential in teaching-learning for the effective realization of learning objectives. They (99%) agreed that applications of electronic media are needed to bring about qualitative as well as quantitative changes in the field of education. They also opined that electronic media reduces load of work for teachers. Although eighty nine percent respondents reported that electronic media provides learning environment in which students take part in the learning process but on the other hand only twenty seven percent respondents agreed that parents should allow their children to watch electronic media continuously in present time and thirty seven percent respondents opined that electronic media can be used for preparing the students for competitive examinations. Half of the respondents reported that electronic media helps in their professional pursuits.

CONCLUSION:

It can be concluded that electronic media has brought many changes in our educational system. It provides an opportunity to develop study habits among the students. It is essential in teaching-learning for the effective realization of learning objectives. Most of the respondents think that applications of electronic media are needed to bring about qualitative as well as quantitative changes in the field of education. Electronic media reduces the load of work for teachers with the help of which they can prepare their lessons more effectively.

Electronic media is used for preparing the students for many competitive examinations. It also helps in our professional pursuits. It helps us in choosing our career.

EDUCATIONAL IMPLICATIONS:

The present study has far reaching educational implications. The study is of great significance for students, teachers and also for a common man. Technology has become an inevitable tool for modern education. It has helped in improving the tasks of teacher, facilitating the process of teaching and learning and enriching the aims of education. Technology attempts at the modernization of the educational system by bringing into use varied electromechanically devices. It facilitates undertaking mass educational programmes successfully utilizing mass communication media. It provides technical guidance and solution to varied educational problems. Utilization of radio, television, telex text and computer assisted instructions for individualized learning has brought more sophistication in the use of appliances and instruments for formal and informal education. Technology helps us in making efforts for equalizing educational opportunities. It provides us up-to-date information, modifications, new equipment or techniques to the teaching. It creates favourable conditions for teaching and learning. It is of great importance in the educational development of students.

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