A STUDY ON THE ROLE OF TEACHERS ON THE USES OF EDUCATIONAL TECHNOLOGY IN SCHOOLS OF TRIPURA

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ABSTRACT

This paper examines the role of Teachers in using Educational Technology in the schools of Tripura. Technology is increasingly becoming popular in educational institutions. As we enter the era of globalization we find the free flow of information via satellite and the internet hold sway in global information dissemination of knowledge. Educational Technology is an instrument for the economic and technological development in the 21st century. Therefore our state cannot afford to be on the wrong side of the digital divide. It identifies the high cost of computer hardware and software; weak infrastructure; lack of human skills, knowledge in using technology, and lack of relevant software appropriate and culturally suitable to Tripura as the major stumbling block to the adoption of secondary education in Tripura. This is a descriptive research paper. The findings of the study reveal pedagogical practices that can be improved through using technology in our schools.

KEYWORDS: *Technology, Curriculum, Cyber Education, Learning environment.*

INTRODUCTION

'A man is an unfinished being and can only fulfill himself through constant learning'-—John.w.Best. Most experts in the field of education agreed that when properly used Educational Technology hold great promise to improve teaching and learning in addition to shaping work force opportunities. In a rapidly changing world of global market, competition, automation and increasing democratization, basic education is necessary for an individual to have the capacity and capability to access and apply information. Many studies have found positive effect associated with technology aided instruction. Teachers can bring the real world to students through technology and can facilitate teaching. The roles of teacher in using Educational Technology are as instructional designer; trainer; collaborator; team coordinator; advisor; and monitoring and assessment specialist. Teaching is a very noble and challenging profession and teachers are the kingpins of any educational system. The

success of a student depends most of all on the quality of the teacher. Every child deserves a quality teacher. The nation's well-being depends on teacher's well-being. The basic tenet of Educational Technology is using all available resources (human and non-human) in a systematic manner to find viable solutions to educational problems.

SIGNIFICANCE OF THE STUDY

We know that knowledge springs from many sources and that whatever is of importance in the learner's environment and suitable for his/her needs is what we must find and use in any teaching learning system by employing effective instructional designs. It is found that technology is not part of classroom in most TBSE schools of Tripura. If our state wants to be a major player in the global market our schools should embrace educational technology. Here comes the importance of the role of Teachers in using educational technology in classroom.

SCOPE

Scope of Educational technology is as wide as education itself. Its scope ranges from the concrete educational process to the most abstract and subtle ones. It includes the use of hardware and software and system analysis in various operations.

OBJECTIVES OF THE STUDY

A research without proper objective is just like a ship without a rudder. The objectives of the present study are as follows:
1. To find out the present status of educational technology in schools of Tripura.
2. To find out the problems of using educational technology in schools.
3. To find out the prospects of using educational technology in schools.
4. To study the role of Teacher in using Technology in classroom.

HYPOTHESES OF THE STUDY
1. Techno trained teachers use educational technology more than those who are not trained.
2. The schools where educational technology is used show better results than those that have not such facility.
3. Urban teachers use educational technology more than rural teachers.

EDUCATIONAL TECHNOLOGY HELPS TO TEACHING AND LEARNING

Though the chalk board, text books, radio, films, and television have been used in teaching and learning system from ages, none has impacted on the educational process like computer, multimedia. There is no doubt that technology provides productive teaching and learning in order to raise peoples creative and intellectual sources specially in today's information society.

TECHNOLOGY AS A TOOL FOR HIGHER EDUCATIONAL DEVELOPMENT

A quality learning environment should establish an efficient connection between the student and instructor, regardless of the equipment being used. There is strong need to know and use modern technology in our life, the economy and education.

EDUCATIONAL TECHNOLOGY AS A COURSE OF STUDY

The role of education in developing countries cannot be over-emphasized. Our schools need to replace the traditional pedagogical systems. As society changes educational system has to change accordingly.

PROBLEMS FACED IN THE USE OF TECHNOLOGY

There are several problems found in the successful use of technology in the schools of Tripura. These are as follows:

WEAK INFRASTRUCTURE

In the schools of Agartala, a formidable obstacle to the use of educational technology is infrastructure deficiencies. Electricity supply is not stable and constant; it is difficult to keep high tech equipment such as computer functioning well. A quality learning environment should establish an efficient connection between the student and instructor, regardless of the equipment being used. Another obstacle is the tee-communication system. It is also recorded that the connection fees for telecom facilities have reduced drastically. But then the major population cannot afford this very much cost.

LACK OF SKILLS

It is found that along with lack of information and infrastructure there is a dilemma between the schools of TBSE and CBSE in Tripura. There is acute shortage of trained teachers in application software, operating systems and network administration. Most TBSE schools of Tripura lack the skills to fully utilize technology in classrooms and still the traditional chalk and duster dominates in school pedagogy.

LACK OF RELEVANT SOFTWARE

There is a great discrepancy between relevant software supply and demand in our state Tripura. Firstly, the cost of producing relevant software for the state's education system is enormous. Secondly, there is dearth of qualified software designers in the state Tripura. To get rid of this situation people need to be trained in instructional design.

PROSPECTS

There are numerous and good prospects for the use of technology in educational institutions. The principle needs listed below focus on improving the success of educational environment.

ENABLING THE LEARNING PROCESS

The primary goal of educators, administrators and facility managers is to provide an environment that is supportive for the learning process. Educational effectiveness can only be achieved if the occupants can complete tasks accurately, quickly and contentedly.

TECHNOLOGY AS AN AID TO TEACHING AND LEARNING

There is no doubt that technology provides productive teaching and learning in order to increase people's creative and intellectual resources especially in today's information society. Through the simultaneous use of audio, text, graphics, motion, technology gives ample and exceptional opportunities to the students to develop capacities for high quality learning.

INDIVIDUAL LEARNING SYSTEM

Due to large classes and differences in individual learning style and pace, micro-computer will enable the student to progress at his or her own pace and receive continuous evaluation feedback and corrections for errors made.

GENERAL PURPOSE CLASSROOM

From schools k-6 to k-12, the traditional classroom is still the most commonly considered academic space. Many studies have linked the positive psychological and physiological effects of daylight to learning. In addition, natural light provides excellent energy saving potential for the dimming and switching of electric lights. Television, video, overheads and slides are just a few examples of visual aids being used extensively in classrooms.

INDOOR AND OUTDOOR CIRCULATION AREAS

In adolescent environment, corridors should be adequately lighted to promote safety and discipline. Corridors lined with lockers require higher level than those used simply for passage. Supplementary lighting may be required at the positions where monitors are stationed. Direct glare from overhead luminaries should be avoided.

TEACHERS ROLE IN USING TECHNOLOGY IN CLASSROOM

- The teacher's primary role is to help students understand particular subject matter. Everything else is secondary. Therefore, the focus of any computer-related professional development should not be on the technology itself, but on how computers can improve the teaching –learning process.
- The teacher should take into account of all the resources available to meet the variety of needs his/her students have and implements well designed activities to address those needs.
- Teachers can give remedial instruction in mathematics using a drill and practice software tools in an overall approach using technology to provide remediation and develop skills so that students may catch up and eventually achieve at high standards.
- The teacher can began the class by giving a multimedia presentation about fractions (1/2, 1/4, etc.) that shows squares being divided into halves and into fourths in primary stage.
- Team teaching in instructional approaches utilizes project-based learning and allows additional time for students to explore some natural phenomenon in depth.
- A teacher can use technology in placing students with different levels of ability together in the same group. Provision is made to ensure that low performing students play a significant part in the group's work.
- The teacher gives assistance, advice, suggestions or poses questions in a way that enable students to make sound decisions and find the information they need to complete a particular task.
- Teachers and administrators can monitor test scores and provide written feedback and encouragement to students about how they might improve their scores on future examinations.

METHODOLOGY

The methodology of the study comprises method of research, population sample, tools procedure of data collection and analysis.

METHOD

The present study fall in the design of Descriptive study as it studies the use of educational technology in schools. The descriptive studies are of immense value in solving the problems about children, school organization, supervision and administration, teaching methods.

TOOLS

The content area selected for rating scale covered three dimensional structures. In selecting content areas, the researcher took help from some experts of some schools and colleges of Agartala. As rating scales uses statements as items, so the researcher prepared item of areas and also assigned numbers to cues used for her five point rating scale. The items were arranged in order of difficult as they said by experts. Thus the content validity of the rating scale was ensured

ITEM ANALYSIS

In item analysis, it is important that it should be carried out on a scientifically selected sample. The researcher selected a sample of students in secondary stage, from eight schools of Agartala. The sample included both boys and girls at the age of 13 and 17 years.

Table-1, Strata and Sex Wise Distribution of Students

Category	Number of pupil		Total
	Boys	Girls	
Rural schools	102	98	200
Urban schools	103	97	200
Total	205	195	400

The answer sheets were scored against a previously prepared guideline for scoring. It showed that the responses were given on a five point scale each of which was assigned by different numbers in chronological order. In that way, the extremely no responses was assigned by 1 mark and extremely yes was assigned by 5 mark. The final rating scale forms 15 items.

PRESENTATION AND ANALYSIS OF DATA

The collected data were presented and analyzed. In order to do that the researcher used some statistical operations like, mean, median, mode S.D, correlation and *t*-test.

MAJOR FINDINGS OF THE STUDY

It is very important to state the findings of the study properly. They are stated below:

1. Techno-trained teachers use more technical implications than the untrained. This is reported according to the answers submitted by students. They are the students. They know the actual situation.
2. The schools having technical facility use technology than those having no such facility.
3. Urban teachers use more educational technology than rural ones. Yet no sufficient tools are supplied in rural areas schools. There are economic problems to all rural schools.

CONCLUSION

The teacher is no longer the center of attention as the dispenser of information, but has to play the role of facilitator, setting project goals and providing guidelines and resources, moving from student to student providing suggestions and support for student activity. There is no doubt that the present situation in the schools of Tripura can be increased if there is incredible resources available and access to the internet. The measure of success should not simply be test scores, but instead, increase attendance, attention and participation. Teachers who used to be the subject experts and the deliverers of all content will transfer more of the learning process and responsibility to students. Students are no longer limited to using a piece of paper and a pencil or pen, but instead have a unique online environment in which they can express information they have been able to gather internalize that data, and then integrate it into assignments.

SUGGESTION FOR FURTHER STUDY

The further study on the present topic may be listed as follows.

1. Research to establish relative advantage of educational technology on education and administration.

2. Research to improve implementation strategies of educational technology in schools.

3. Strategies for staff development to promote the effective use of technology through the curriculum.

4. Underlying theories in using technology tools and infrastructure to support teaching and learning

5. A study on the effectiveness of different technological strategies for developing teaching skills among student teachers.

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