

## **Teachers Perceptions on the Effectiveness of Use of Advanced Educational Technology Tools**

**Dr. Victoria Susan Ijjina**

Assistant Professor,

Dept. of Education, BBAU

Lucknow

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### **Abstract**

Today the learning environments have been changing fast with times. Books in physical form are being replaced with books in digital forms. Dialogues are being developed not only in classrooms but on digi-pages such as Face book, Twitter, Whatsapp. In this phenomenal change in learning environment, teacher has to be vested with the knowledge and mechanisms to handle and control the digital world. The pedagogy in digital world has become more daunting, but educators should realize the fact that this generation esteems education. For this reason teachers should become more aware of the Educational tools available for effective teaching and learning. The present study focuses on the perception of teachers on the effectiveness of use of advanced educational technology tools in teaching learning process.

**Keywords:** Educational Technology Tools, Teacher, Learner, Pedagogy, Learning Environment

### **Introduction**

Today we live in a digital era where every activity is connected with the use of some form of technology. Technology has changed the way we communicate, live, learn and even our relationships in the society. Learning environments too have been changing faster. Learners satisfy their queries on sites and blogs and on pages like Yahoo answer, Wiki answer giving shudders to their teachers that the learners know better than the teachers. Information is available on a single click freely and instantaneously. Effective use of Technology is a must in the teaching learning environment to create suitable learning environment. Thus the present study aims to study the perceptions of effective use educational technology tools of secondary school teachers in Lucknow city.

## Objectives

1. To study the effective use of Educational Technology tools by secondary school teachers in Lucknow city.
2. To study the effective use of Educational Technology tools by secondary school teachers with respect to gender, qualification, experience and type of school

## Variables

S. No.	Variable	
1	Gender	Male Female
2	Qualification	UG PG
3	Experience	0- 5 years 5-10 years 10-20 years Above 20 years
4	Type of School	Government Schools Aided Schools Low Cost Private Schools Well Established Private Schools

**Research Method:** Survey method is used by the researcher

**Research Tool:** Questionnaire prepared by the researcher himself is used in the present study. The items of the questionnaire were finalized after discussion with eminent faculty members in the field of Education. The questionnaire consists of

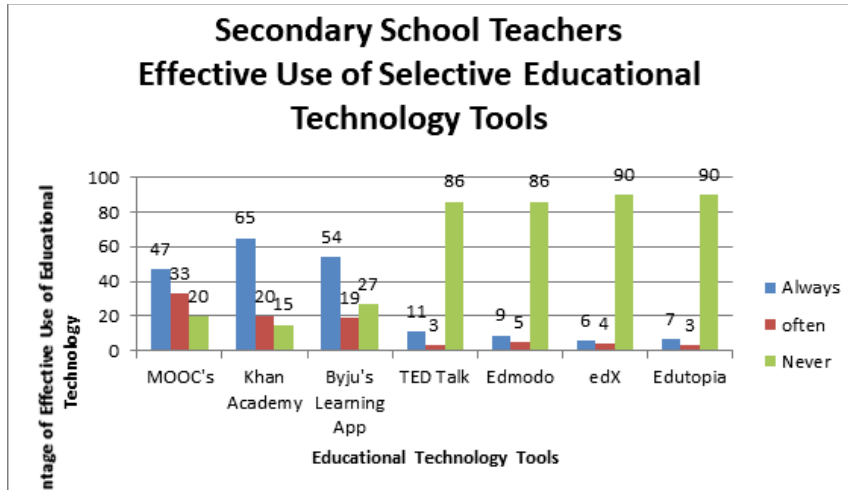
- A) Use of Educational Technology Learning Apps and
- B) Use of MHRD Educational Technology Tools
- C) Use of Advanced Teaching Learning techniques

**Sample and Sampling Techniques:** A sample of 110 teachers was selected from various schools in Lucknow using random sampling technique. Schools were selected using purposive sampling technique.

**Statistical Techniques: Descriptive:** Mean, S.D. and Percentages

**Inferential:** 't' test and ANOVA

## Findings and Discussion



**Fig 1:** Effective use of Educational Technology tools of Secondary School Teachers

The above table indicates that there is very little awareness about Educational Technology tools in secondary school teachers. Popular Educational Technology tools are Khan Academy and Byju's Learning App.

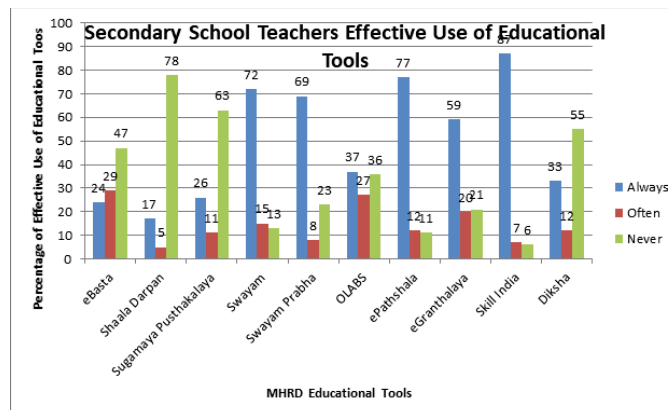


Fig 2: Effective Use of Educational Tools of MHRD

The above figure indicates that most of the teachers are not aware of various Educational Tools of MHRD. Teachers should be educated about the various tools available for better teaching learning atmosphere.

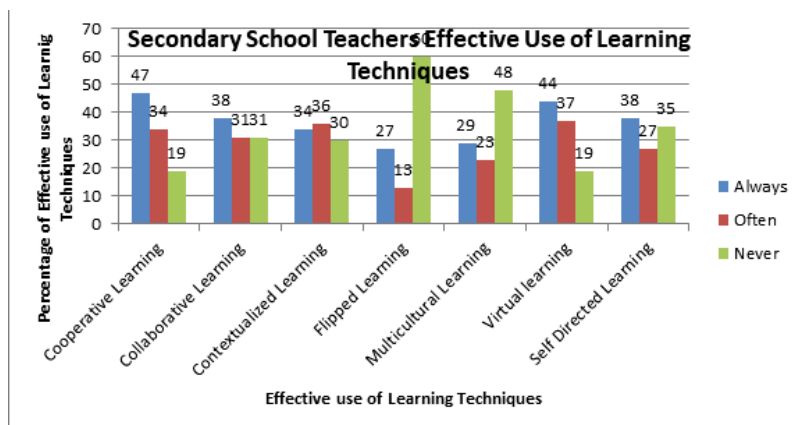


Fig 3: Secondary school teachers' effective use of Learning Techniques

The above figure indicate that to some extent the cooperative and collaborative learning techniques are used but new and innovative techniques like flipped learning are rarely used.

### Variable wise Findings:

#### Gender

Table 1: Comparison of scores with respect to Gender

Gender	N	Mean	SD	't'	't' critical
Male	70	49.87	3.16	1.31*	1.97
Female	40	43.12	2.91		

\* Significant at 0.05 level

The above table indicates that there is significant difference male and female teachers' perception of effective use of Educational Technology tools. Indian ethos and cultural barriers often prevent women from effective use of Educational Technology tools. Social stigma also discourages women from frequent use of Educational Technology tools

## Qualification

**Table 2: Comparison of scores with respect to Qualification**

Qualification	N	Mean	SD	't'	't' critical
UG	79	44.17	4.12	1.63*	1.97
PG	31	48.53	3.09		

\*Significant at 0.05 level

The above table indicates that there is significant difference with respect to qualification of secondary school teachers. Awareness and Knowledge plays a key role in understanding the latest concepts. Higher qualification will have more scope for better understanding of the educational technology tools.

## Experience

**Table 3: Comparison of scores with respect to Experience**

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	9730.000726	3	3243.33358	103.591871*	6.5307E-32	2.68713923
Within Groups	3443.964186	110	31.3087653			
Total	13173.96491	113				

The above table indicates that there is variance with respect to experience. Technology is ever changing and new tools add up with advanced concepts and other hardware requirements. Effective use of educational technology tools depends on technological know- how and the knowledge of operating technological equipment.

## Type of School

**Table 4: Comparison of scores with respect to Type of School**

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	9577.995215	3	3192.665072	97.6629915*	6.9708E-31	2.68713923
Within Groups	3595.969697	110	32.69063361			
Total	13173.96491	113				

The above table indicates that there is variance with respect to type of school. Technology involves finances and it is not the same with all schools. Especially the low cost schools cannot afford for costly equipment like LCD projector and high speed internet facility. On the other hand well established private schools can afford for quality educational tools. Thus there is variance in perceptions of secondary school teachers with respect to type of school.

### **Suggestions**

Educational Technology tools will enhance learning but its effective use depends on many factors. Teachers will always try to extend their best services to the students but in the case of use of Technological tools it requires the expertise to operate the equipment and solve problems. The greatest drawback of technology is it often changes /upgrades its version which requires corresponding changes in hardware or software. Computer literacy is a must for better use of technology tools. Teachers are often burdened with over workload and deadlines for syllabus completion which hampers them from using technology tools for enhanced learning. Lack of awareness about various latest technological tools is also another reason for poor utilization of resources. Teachers should be informed and trained in latest Educational technology tools for effective use in teaching and learning and build a more competent society.

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