IMPACT: International Journal of Research in Engineering and Technology
ISSN (P): 2347–4599; ISSN (E): 2321–8843
Vol. 10, Issue 9, Sep 2022, 9–14

USAGE OF TECHNOLOGY IN TEACHING FOR HIGHER SECONDARY STUDENTS

Kannan G & Venkataraman S

Assistant Professor, Department of Education, Annamalai University, Annamalainagar, Chidambaram, Tamil Nadu, India

Received: 23 Sep 2022 **Accepted:** 19 Sep 2022 **Published:** 21 Sep 2022

ABSTRACT

The aim of this study is to find out the Usage of Technology in Teaching for Higher Secondary Students. The present investigation was undertaken by using normative survey method. The present study consists of 200 Higher Secondary School Teachers working at Higher Secondary Schools located in Nagappattinam district of Tamil Nadu. The sample was selected by using simple random sampling technique. For this study the Usage of Technology in Teaching Scale, Prepared by Catherine S. Fichtena, (2014) is used to collect data. The results shos that the Higher Secondary School Teachers are having moderate level of Usage of Technology in Teaching.

KEYWORDS: *Usage of Technology, Teaching, Higher Secondary Students.*

INTRODUCTION

There is strong evidence that ICT may help teaching and learning when used properly for specific goals in specific circumstances and by the right people. But it is now undeniably established that its inclusion in classrooms does not, by itself, enhance instruction or boost achievement. It is obvious that technology will not be used if the teacher cannot access it. We are aware that state funding for these resources is limited and that urban areas often have greater access to ICT resources than rural ones. It becomes clear that there are other, significant teacher-related elements that affect classroom utilisation. These primarily include instructor ICT literacy and confidence, as well as topic teacher education to help them integrate ICT into learning areas.

IT Access at School

Today, the vast majority of pupils attend classes and attend school in facilities that have computers and Internet connectivity of some kind. Where disparities in school access still exist, they are related to student-to-computer ratios, teacher IT training, and teaching methods. These problems extend beyond merely access and include IT use's effectiveness and quality. Over the past ten years, there has been a sharp growth in access to computers and the Internet. The majority of classes in schools have access to the Internet in at least one location.

Teachers and Information Technology

Many teachers now use computers in the classroom, according to some research, although they frequently use them for drill-and-practice exercises rather than for more complex activities and projects like multimedia projects and instructing from Internet-based curricula. But every year, new kinds of IT are brought into the classroom. Online learning, often referred to as electronically delivered learning or e-learning, and distance education, in which time, place, or both separate the teacher and students, have started to alter the landscape of education, particularly at the secondary level. The delivery

of distance education courses includes written correspondence, text, graphics, audio and videotape, CD-ROM, online learning, audio and videoconferencing, interactive TV, and fax, among other synchronous (real-time) and asynchronous modes of instruction (Kaplan-Leiserson 2000).

E-learning encompasses a wide range of tools and procedures, such as computer- and Web-based learning, virtual classrooms, virtual high schools, and online collaboration. It covers content distribution over the Internet, intranets, audio and videotapes, satellite broadcasts, interactive TV, and CD-ROMs. For the 2001 academic year, twelve states have created fully functional online or virtual high school programmes, and five more states have programmes in the works.

There is a distinct distinction between teachers who select ICT tools to deepen their students' grasp of a subject and those who select tools just to present their students' work in novel ways without any connection to the subject. The evidence demonstrates that teachers may maximise the effects of using ICT in terms of raising students' achievement when they apply their pedagogical understanding of the subject as well as of how students understand and learn the subject (Cox et al., 2003). When students are forced to think critically and to challenge their own understanding, achievement is most positively impacted.

Need and Importance of the Study

The effects of information and communication technology (ICT) on schools are a complex topic to research because of the many variables that affect it, its close ties to society, the political landscape, and decision-making processes, as well as its reliance on the institution's previous history and educational values and norms. The school offers students a distinctive learning environment while serving as a workplace for instructors and other professionals. Both educational scholars and policymakers held upbeat expectations for significant changes in teaching and learning procedures from the start of the use of ICT. ICT integration into the classroom has frequently been studied by concentrating on a teacher's unique traits, such as pedagogical beliefs or challenges they have encountered. The school level has been the second main area of concentration, specifically how the school should help teachers as they implement their lessons. Thirdly, several studies have concentrated on external factors, such as the need for technical or pedagogical assistance for instructors or for in-service training, as well as the dearth of pertinent teaching resources. Hence, to know Information Technolgy initiative of Higehr Secondary students the researcher takes up this study.

Statement of the Problem

Technology empowers students by giving them control over their learning process, making education relevant to their digital lives, and preparing them for the future as they move towards individualised learning. Students are motivated to become problem solvers, critical thinkers, collaborators, and creators thanks to technology and access to resources outside of the classroom. Students that have effectively incorporated technology into their classrooms grow to love learning for the rest of their lives. Educators are constantly working to make learning more individualised for kids. With access to longitudinal data, material, real-time student data, apps, and more, technology can aid in their advancement. Through the use of digital tools for formative and summative assessments and the creation of blended learning environments, technology may support educators in bringing new methods of teaching and learning to the classroom. The study taken by the investigator can be stated as "**Usage of Technology in Teaching for Higher Secondary Students**".

OBJECTIVES OF THE STUDY

Following are the Objectives Framed for this Study:

- To find out the level of Higher Secondary School Teachers' Usage of Technology in Teaching.
- To find out whether there is any significant difference between male and female, Arts and Science Group, rural and urban Higher Secondary School Teachers with respect to their Usage of Technology in Teaching.

Hypotheses of the Study

On the basis of the above said objectives the suitable hypotheses were framed.

METHOD OF STUDY

The present investigation was undertaken by using normative survey method.

Sample of the Study

The present study consists of 200 Higher Secondary School Teachers working at Higher Secondary Schools located in Nagappattinam district of Tamil Nadu. The sample was selected by using simple random sampling technique.

Tool Used

- For this study the Usage of Technology in Teaching Scale, Prepared by Catherine S. Fichtena, (2014) is used to collect data.
- In order to find out the Higher Secondary School Teachers' Usage of Technology in Teaching, the mean and S.D have been calculated.

Table 1: The Mean and SD of Higher Secondary School Teachers' Usage of Technology in Teaching Scores

N	Mean	Std. Deviation
200	64.53	13.729

It is clear from the Table above, the calculated mean score of entire sample indicates that the Higher Secondary School Teachers have moderate level of Usage of Technology in Teaching.

Null Hypothesis

There is no significant difference between male and female Higher Secondary School Teachers with respect to their Usage of Technology in Teaching.

In order to test the above Null Hypothesis't' value is calculated.

Table 2: Significance of Difference Between Male and Female Teachers With Respect to Their Usage of Technology in Teaching

Gender	N	Mean	SD	t-value	Significance at 0.05 level
Male	92	62.89	11.96	1.02	Not significant
Female	108	65.06	14.28		

It is clear from the Table above, since the 't' value is not significant at 0.05 level, the above Null hypothesis is accepted and therefore, it can be said there is no significant difference between Male and Female Teachers with respect to their Usage of Technology in Teaching.

Null Hypothesis

There is no significant difference between Arts and Science Group Teachers with respect to their Usage of Technology in Teaching.

In order to test the above Null hypothesis't' value is calculated.

Table 3: Significance of Difference Between Arts and Science Group Teachers with Respect to Their Usage of Technology in Teaching

Group	N	Mean	SD	t-value	Significance at 0.05 level
Arts	95	61.87	12.07	0.85	Not significant
Science	105	63.83	15.35		

It is clear from the Table above,, since the 't' value is not significant at 0.05 level, the above Null hypothesis is accepted and therefore, it can be said there is no significant difference between Arts and Science Teachers with respect to their Usage of Technology in Teaching.

Null Hypothesis

There is no significant difference between rural and urban School Teachers with respect to their Usage of Technology in Teaching.

In order to test the above Null hypothesis 't' value is calculated.

Table 4: Significance of Difference Between Rural and Urban School Teachers with Respect to Their Usage of Technology in Teaching

Locality	N	Mean	SD	t-value	Significance at 0.05 level
Rural	119	65.59	12.93	2.09	Significant
Urban	81	61.00	16.34		

From the above table, since the 't' value is significant at 0.05 level, the above Null hypothesis is rejected and therefore, it can be said there is significant difference between rural and urban Teachers with respect to their Usage of Technology in Teaching .

Important Findings

- Following are the important findings arrived by the investigator based on the data collected and analyzed.
- Higher Secondary School Teachers are having moderate level of Usage of Technology in Teaching.
- There is no significant difference between Male and Female, Arts and Science Teachers and there is significant difference between rural and urban with respect to their Usage of Technology in Teaching.

CONCLUSIONS

The current study on higher secondary school teachers' use of technology in the classroom sheds light on where these educators stand right now. They are operating at a medium level. This needs to be brought up again. In the future, teachers and pupils may use devices that have been specially coded. Teachers that take the effort to use information technology in the classroom for instruction should receive sufficient credit in order to inspire them.

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