

AWARENESS AND UTILIZATION OF TECHNO-PEDAGOGY AMONG SECONDARY LEVEL TEACHERS IN COIMBATORE DISTRICT

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ABSTRACT

This present study explores the Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning among Secondary level teachers. ICTs can enhance the quality of education in several ways: by increasing learner motivation and engagement by facilitating the acquisition of basic skills, and by enhance teachers. ICTs are also transformational tools which, when used appropriately, can promote the shift to a learner-centred environment. This study consists of 200 secondary level teachers used stratified random sampling technique. An analysis of the results was carried out using the SPSS software package. And the finding of this study shows that Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning are low for Secondary level teachers.

KEY WORDS

Awareness, Utilization, ICT, Techno-Pedagogy, Teaching and Learning, secondary level teachers

INTRODUCTION

Importance of education in almost all walks of life has increased with the support of information and communication technologies (ICT). During the past 20 years, the use of ICT has fundamentally changed the working of education. In the current environment-conscious world, the importance of education and acceptability of ICT as a social necessity has been increasing. Social acceptability of information and communication tools is necessary to improve the mobility in the society and increase the pitch for equity and social justice. Education as a qualitative development is not confined within the classroom structure. The modern tools of ICT such as eLearning and online practice of learning and getting information are much sought after by the students as well as by the institutions.

The government is spending a lot of money on ICT. In the education sector, the National Mission on Education is emphasizing on the role of ICT in increasing the enrolment ratio in education. School education in India has a problem of high dropout rate and we need to work on how to decrease this rate. Similarly, in the field of higher education, it needs to increase the number of students. Therefore, if it makes our learning more engaging with the use of ICT, it can completely change how our

education system works. Also, it should examine the challenges of cost-factor and availability of trained teachers in the process of dissemination of education with the help of ICT.

ADVANTAGES OF ICT IN EDUCATION

Here are some of the benefits which ICT brings to education according to recent research findings.

General benefits

- ❖ Greater efficiency throughout the school.
- ❖ Communication channels are increased through email, discussion groups, and chat rooms
- ❖ Regular use of ICT across different curriculum subjects can have a beneficial motivational influence on students' learning.

Benefits for teachers

- ❖ ICT facilitates sharing of resources, expertise, and advice
- ❖ Greater flexibility in when and where tasks are carried out
- ❖ Gains in ICT literacy skills, confidence, and enthusiasm.

- ❖ Easier planning and preparation of lessons and designing materials
- ❖ Access to the up-to-date pupil and school data, anytime and anywhere.
- ❖ Enhancement of professional image projected to colleagues.
- ❖ Students are generally more 'on task' and express more positive feelings when they use computers than when they are given other tasks to do.
- ❖ Computer use during lessons motivated students to continue using learning outside school hours.

Benefits for students

- ❖ Higher quality lessons through greater collaboration between teachers in planning and preparing resources.
- ❖ More focused teaching, tailored to students' strengths and weaknesses, through better analysis of attainment data
- ❖ Improved pastoral care and behaviour management through better tracking of students
- ❖ Gains in understanding and analytical skills, including improvements in reading
- ❖ Development of writing skills (including spelling, grammar, punctuation, editing, and re-drafting), also fluency, originality, and elaboration.

- ❖ Encouragement of independent and active learning, and self-responsibility for learning.
- ❖ Opportunities to collaborate on assignments with people outside or inside school.

REVIEW OF RELATED LITERATURE

Swamy, A.M. (2010) conducted a study on “Internet awareness and competence among high school students and teachers”. The researcher found that the MahitiSindhu project had significantly enhanced the awareness of Internet among the teachers who were involved with the project and the training programme was able to create awareness regarding Internet competence in the high school students.

Ganesan P and Krishnakumar R, (2016) in their study deals about the difference between teacher educators’ attitude towards ICT and their level of attitude; whether it is favourable or unfavourable? The participants were the teacher educators of Colleges of Education in Coimbatore, South India. Cluster Sampling Technique was adopted. Results indicated significant difference in their attitude with respect to their locality of home. Majority of teacher educators have favourable attitude.

OBJECTIVES OF THE STUDY

The objectives of the present study are as follows;

1. To measure the level of Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning of Secondary level teachers.
2. To find out the significance of difference, if any between Male and Female Secondary level teachers with respect to their Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning.
3. To find out the significance of difference, if any between Tamil Medium and English Medium secondary level teachers with respect to their Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning.
4. To find out the level of correlation between Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning among the Secondary level teachers.

HYPOTHESIS OF THE STUDY

The hypotheses of the present student are as follows;

1. The mean score on the level of Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning among the Secondary level teachers in the high schools in Coimbatore District is high.
2. There is no significance difference, if any between the mean scores on the level of Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning with respect to gender.
3. There is no significance difference, if any between the mean scores on the level of Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning with respect to medium of instruction.
4. There is no significance of correlation between the level of Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning among Secondary level teachers

METHODOLOGY OF THE STUDY

The investigator followed the survey method for the study. Awareness of Techno-Pedagogy Scale and Utilization of Techno-Pedagogy Scale was developed and administered by the investigator to the Secondary level teachers in Coimbatore District.

SAMPLE

The population for the study consisted of Secondary level teachers in Coimbatore District. The investigator selected 200 Secondary level teachers from the selected high schools by using stratified random sampling technique.

STATISTICAL TECHNIQUES USED

The data were tabulated and statistically analyzed by percentage analysis, differential analysis and relational analysis.

DATA ANALYSIS

HYPOTHESIS – 1

The mean score on the level of Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning among the Secondary level teachers of high schools in Coimbatore District is high.

TABLE 1.1

Mean and Standard Deviation Scores of Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning among the Secondary level teachers

S.No	N	AWARENESS		UTILIZATION	
		MEAN	S.D	MEAN	S.D
1.	200	37.13	10.72	35.01	16.16

From the above table (1.1) that the Mean and Standard Deviation scores on the level of Awareness of Techno-Pedagogy are 37.13 and 10.72. It is interpreted that the level of Awareness of Techno-Pedagogy is low. It is also seen the Mean and Standard Deviation scores on the level of Utilization of Techno-Pedagogy for Teaching and Learning are 35.01 and 16.16. It I revealed that the level of Utilization of Techno-Pedagogy for Teaching and Learning is low. Hence, the null hypothesis framed is rejected.

HYPOTHESIS – 2

There is no significance difference, if any between the mean scores on the level of Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning with respect to gender.

TABLE 1.2

Significance difference between the Mean scores of Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning among Secondary level teachers with respect to their Gender

Dependent Variables	Gender	N	Mean	S.D	‘t’ value
Awareness of Techno-Pedagogy	Male	55	37.69	12.42	0.415**
	Female	145	36.91	10.04	
Utilization of Techno-Pedagogy for Teaching and Learning	Male	55	40.92	15.31	3.321*
	Female	145	32.77	15.95	

**** - Not Significant at 0.05 level**

*** - Significant at 0.05 level**

From the table 1.2 the ‘t’ value (0.415) for the Awareness of Techno-Pedagogy is less than the table value 1.96. Hence, it is not significant at 0.05 level. It is understood that there is no significant difference between the Mean scores on the level of Awareness of Techno-Pedagogy among Male and Female respondents.

It is also revealed that the ‘t’ value (3.321) of Utilization of Techno-Pedagogy for Teaching and Learning is greater than the table value 1.96. Hence, it is significant at 0.05 level. It is understood that there is a significant difference between the Mean scores

on the level of Utilization of Techno-Pedagogy for Teaching and Learning among the Male and Female respondents.

Hypothesis – 3

There is no significance difference, if any between the mean scores on the level of Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning with respect to medium of instruction.

TABLE 1.3

Significance difference between the Mean scores of Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning among Secondary level teachers with respect to their Medium of Instruction

Dependent Variables	Medium of Instruction	N	Mean	S.D	't' value
Awareness of Techno-Pedagogy	Tamil Medium	173	36.51	10.36	3.848**
	English Medium	27	41.11	12.26	
Utilization for Teaching and Learning	Tamil Medium	173	34.75	16.47	3.129**
	English Medium	27	36.69	14.14	

**** - Not Significant at 0.05 level**

From the table 1.3 the 't' value (3.848) and (3.129) for the Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy is above the table value 1.96. Hence, it is not significant at 0.05 level. It is understood that there is a significant difference between the Mean scores on the level of Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning among Secondary level teachers with respect to their medium of instruction.

Hypothesis – 4

There is no significance of correlation between the level of Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning among Secondary level teachers

TABLE 1.4**Significant correlation between Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning**

Variables	N	'r' value
Awareness of Techno-Pedagogy	200	0.025**
Utilization of Techno-Pedagogy for Teaching and Learning		

**** - Not Significant at 0.05 level**

From the table 1.4, it is observed that the obtained 'r' value (0.025) is not to significantly correlate. Hence, there is no significant correlation between the Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning among Secondary level teachers.

FINDINGS OF THE STUDY

1. The Mean Awareness scores of Secondary level teachers towards Techno-Pedagogy is Low.
2. The Mean Utilization scores of Secondary level teachers towards Techno-Pedagogy for Learning is Low.
3. There is no significant difference between the Mean scores on the level of Awareness of Techno-Pedagogy among Male and Female secondary level teachers.
4. There is a significant difference between the Mean scores on the level of Utilization of Techno-Pedagogy for Learning among the Male and Female secondary level teachers.
5. There is a significant difference between the Mean scores on the level of Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Learning with respect to their medium of instruction.
6. There is no significant correlation between the Awareness of Techno-Pedagogy and Utilization for Learning among Secondary level teachers.

CONCLUSION

The present study has investigated into the Awareness of Techno-Pedagogy and Utilization of Techno-Pedagogy for Teaching and Learning among Secondary level teachers of High schools in Coimbatore District. The study has shown that there is wide scope for improving the Awareness of Secondary level teachers and there is a grave need to improve the Utilization of Secondary level teachers towards Techno-Pedagogy Awareness towards the Techno-Pedagogy and their useful tools for the rich enhancement of teaching and learning which concentration on sustaining and improving this adequate knowledge and developing Secondary level teachers right technologies are essential in the present situation.

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WEB RESOURCES

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