Learning Outcomes and ICT Integration: Techno Pedagogical Attitude of Primary School Teachers in Kannur District Kerala

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Abstract- *During this post chalk-and-talk teaching scenario there need a hasty application of technology in the process of teaching and learning. To access this inevitable, which can only make easy to convey the learning outcomes to the digital students and education in leading position, attitude of teachers is a crucial thing. Techno pedagogy is the hybrid method of teaching in which ICT resources are applied in class room interaction practices. It is the art and craft of integrating technology in modifying teaching learning involvements in an active manner. Attaining techno-pedagogical competences will make teaching and learning a pleasant exercise as it would reduce the burden on the teachers and assist the students to dig deeper into realm of knowledge. The present studies try to understand the present attitude of teachers and to what extent it should be changed.*

Key Words: Techno Pedagogy, Learning Outcomes, TPAC

Introduction

"Technology won't replace teachers. But Teachers who use technology will probably replace Teachers who do not."

Education system is now witness a paradigm shift from the outdated chalk-and-talk teaching methodology to digitizing the pedagogical approach through technical devices. It opines that such a conversion is not only increasing the potentiality of the teachers but also give expansion to the information base of pupils so as make them competitive in the transnational arena. Technology is empowering students in four key ways like democratization of knowledge, participatory learning, authentic learning and multimodal learning. As per the quotes of Ted, "Technology is a vital part of educating today's students and it is used whenever possible in the classroom so that improves the overall learning environment." Students will also need to get acquainted with technology because they will need to use it in the future. An inspiring teacher not only shows the right path that the students should follow but also prepares the human resource for the further development of the nation. Using technology in education is considered a relatively new pedagogy to integrate technology into curricula. Teachers, who become the main focus during the process of integrating these technologies into the curriculum, face several obstacles when trying to integrate technology into their curricula. Many school districts are pushing technologies across all levels of education. Recent studies show that, the successful implementation of the

educational technologies depends largely on the attitudes of the educators. Many research points out that, a teacher's attitude or belief is one of the several important human factors which has a significant impact on the Techno pedagogy and the implementation of the technology in classroom. The attitude of teachers is a major enabling/disabling factor in the adoption of the technology. The teachers with positive attitudes towards the technology feel more comfortable while using it and they usually incorporate it into their teaching activities.

Here in this present study teacher techno pedagogical attitude is operationally defined as teachers' attitude towards transmission of content using technology. Attitude indicates an emotional reaction towards a person or thing. It refers to a manner of acting feeling, or thinking that shows one's disposition; opinion or mental set. It is actually a personal response to an object, developed through experience which can call favourable or unfavourable. Attitude may be towards concrete or abstract things. Attitude may be considered to be one phase of personality. Teaching Attitude refers teachers' beliefs, dispositions and opinions regarding the use of technology in the classroom.

Objectives of the study

The objectives of the present study are as follows:-

- To find out the level of techno pedagogical attitude of primary teachers in Kannur.
- To check whether there exist any significant differences in the level of techno pedagogical attitude of among primary teachers based on gender, type of management and optional subjects.

Hypotheses of the study

In the light of the objectives, the following Hypothesis was formulated.

- The level of techno pedagogical attitude of primary teachers is satisfactory.
- There exists significant difference of techno pedagogical attitude among primary teachers based on the following sub samples:
    - Gender
    - Type of management

Methodology

The present study is designed as a survey which comes under the preview of description research.

Population and Sample

The population of the study includes all primary school teachers in Kannur district. The sample of the study was consists of 240 primary school teachers taken from various schools in Kannur.

Tools to Be Used

The investigator used the tool Techno Pedagogical Attitude Scale.

Procedure

The tool was administrated to the primary school teachers and the responses were scored carefully and subjected to statistical analysis. The difference in the mean scores of Techno Pedagogical Attitude for total and the relevant sub sample was calculated using' test.

Result

Level of Techno Pedagogical Attitude among primary school teachers is explained below with help of statistical analysis. The total sample of primary teacher has a mean score of 97.47 with standard deviation 9.61. The maximum possible score on the scale is 126 and the minimum possible score is 42. The mean score obtained is 97.47 which show that primary teachers have satisfactory level of Techno Pedagogical Attitude.

The total sample was divided in to sub samples based on the variables –Gender and Type of management of primary school teachers. The level of these sub samples of primary school teachers are discussed below:

Gender: The total sample was classified into two groups based on gender i.e.; male and female.

Male: The sub sample male obtained **a** mean score of 97.03 with standard deviation 9.67. The distribution being more or less normal; it suggests that male primary school teachers have satisfactory level of Level of Techno Pedagogical Attitude.

Female: The sub sample female obtained a mean score of 97.69 with standard deviation 9.61. The distribution being more or less normal, it suggests that female primary teachers have Level of Techno Pedagogical Attitude.

Type of management: The total sample was classified in to two groups, via; Government/Aided and Un Aided.

Government: The Government primary schoolteachers obtained a mean score of 97.34 with standard deviation 9.77. The distribution being more or less normal; it suggests that Government primary school teachers have satisfactory level of Techno Pedagogical Attitude.

UN Aided**:** The UN Aided primary school teachers obtained a mean score of 97.60 with standard deviation 9.50. The distribution being more or less normal; it suggests that Un Aided primary school teachers have satisfactory level of Techno Pedagogical Attitude.

Test of significance of difference between mean scores of Techno Pedagogical Attitude for the relevant sub sample:

The second hypothesis of the study was to compare the mean scores of Techno Pedagogical Attitude for the relevant sub samples. For the verification of hypothesis the investigator assumed the null hypothesis there is no significant difference between the mean

score of Techno Pedagogical Attitude among the relevant sub samples. The null hypothesis was statistically tested by the following procedure.

The mean scores of Techno Pedagogical Attitude were compared for the different sub sample based on the Gender and Type of management of primary school teachers. The calculated Critical Ratio (t- value) were interpreted using the 't - distribution for two tailed test of significance for appropriate degree of freedom at 0.05 level and 0.01 level of significance.

Analysis of difference between mean scores of Techno Pedagogical Attitude of sub samples selected on the basis of gender and type of management.

Gender wise difference in Techno Pedagogical Attitude among primary school teachers:

TABLE 1

Data and result of t- test of the variable Techno Pedagogical Attitude for male and female primary school teachers are presented in the Table No:1

SI.No	Gender	N	Mean	S.D	t- value	Level of significance
1.	Male	80	97.03	9.67	0.507	N.S
2.	Female	160	97.69	9.61		

Discussion: Mean score of Techno Pedagogical Attitude for Male primary teachers were obtained as 97.03 and the standard deviation was found to be 9.67. Mean score of Techno Pedagogical Attitude for Female primary school teachers were obtained as 97.69 and the standard deviation was found to be 9.61.
The value 1.96 or 2.58 significant at 0.05 level or 0.01 level. The obtained t- value is not significant at both levels.

Type of management difference in Techno Pedagogical Attitude among primary school teachers.

Data and result of t- test of the variable of* Techno Pedagogical Attitude *among primary* school *teachers for government and unaided area are presented in the Table - 2

TABLE 2

SI.No	Type of management	N	Mean	S.D	t- value	Level of significance
1.	Gov/aided	120	97.34	9.77	0.208	N.S
2.	Unaided	120	97.60	9.50		

Discussion: Mean score of Techno Pedagogical Attitude for government primary schoolteachers were obtained as 97.34 and the standard deviation was found to be 9.77. Mean score Techno Pedagogical Attitude for private primary school teachers were obtained as 97.60 and the standard deviation was found to be 9.50. The value 1.96 or 2.58 significant at 0.05 levels or 0.01 level. The obtained t- value is not significant at both levels.

Conclusion

The best teacher brings diverse experiences and frames of reference to the classroom. In this modern scenario the teacher who uses technology in teaching-learning process plays a vital role. Technology improves learning and makes the teaching-learning process more interesting. So the techno-pedagogical skill of the teachers has in need to be increased and also should bring positive attitude towards techno-pedagogy.

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