

A STUDY OF ATTITUDE OF SECONDARY SCHOOL TEACHERS TOWARDS USING TECHNOLOGY IN EDUCATION

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INTRODUCTION

Growth of Technology in brought in rapid changes in various fields. It had also made entry in to school education because of its appropriateness, applicability and veracity in use for classroom teaching. It is well recognized that Technology has great potential for improving the teaching learning process. It facilitates individualized learning and develops problem solving skills. Its interactive nature motivates students to learn. Education and teachers believe that with the help of Technology, quality of education given to the students can be significantly improved. The National Policy on Education 1986, as modified in 1992, stressed the need to employ educational technology to improve the modality of education. The policy statement led to two major centrally sponsored schemes, namely-Educational technology (ET) and Computer Literacy and studies in school (CLASS) paving the way for a more comprehensive centrally sponsored scheme Information and communication technology at schools in 2004.

Rationale of the study

Knowledge of Technology and use of Technology skills in teaching and learning have become imperative for today's teacher educator. Technology integration in institution is being perceived as a necessity and is growing exponentially. The pervasive use of Technology in all spheres of life, the knowledge economy and the paradigm shift together, generates demands on the institution to adopt ways that help inculcate 21st century skills amongst students. In order to integrate Technology in teacher education institution, the first need is to study and assess the teacher educators' attitude. It is the need of the hour to examine and assess the attitude of the teacher educators towards Technology. As this was the case, the present study is proposed.

Review of the related literature

Maria kyriakidou et al (1999) found that majority of student teachers in Cyprus have positive attitudes towards computer for personal use More than 60% of the Cypriots revealed not only that they like working with computers but also that they have confidence working with them.

Sarangi (2003) found that teacher educators have a low positive attitude for ICT though not negative. Teacher educators had a limited idea about how the available ICT equipments could be used in teaching learning situation.

Hew & Brush (2007) in their study found that negative attitudes of teachers and the limited knowledge of teachers about technology integration are the main barriers for the technology integration in education.

Mehra and Nawa (2009) conducted a study on "school teachers" Attitude towards information and communication technology. The school teachers, on the whole, exhibited positive attitude towards ict, so ICT must be given higher priority in teacher education curriculum, so that the future teachers can cope with various challenges in education system, more specifically the new roles of teachers in ICT based teaching learning system. In this study on "Teacher competencies for the use of ICT".

Hussain (2010) found that teachers have positive attitude towards ICT and the teachers think that using ICT skills in developing and presenting information is essential technical competencies that teachers need to require.

Nadibabalema , P.(2014) on his study entitled "Teachers attitude towards use of ICT" result indicated that the teachers have a favourable attitude the use of ICT.

STATEMENT OF THE PROBLEM

"A study of attitude of secondary school teachers towards using Technology in Education."

OPERATIONAL DEFINITION OF VARIABLES OF THE STUDY

Attitude - Attitude is derived from a word Attitudine which means which reflects fitness or posture.

A predisposition or a tendency to respond positively or negatively towards a certain idea, object, person or situation is called Attitude.

Attitude influences an individual's choice of action and responses to challenges, incentives and rewards.

Technology -Technology refers to methods, system and devices which are the result of scientific knowledge being used for practical purposes.

Teacher - A teacher is a person who facilitates learning and helps others to acquire knowledge, competences or values.

Secondary school – the Academic levels on which provide teaching learning to 9th to 10th standard students in different subjects 13 to 15 years students involve in this level.

Objectives of the study

1. To study the attitude of secondary school teachers towards using technology.
2. To compare the attitude of secondary school teachers towards technology with respect to the types of school.
3. To compare the attitude of male and female teachers of secondary school towards using technology.
4. To compare the attitude of secondary school teachers towards technology with respect to the medium of school.

Hypotheses

1. There will be no significant difference between attitudes of secondary school teachers towards technology.
2. There will be no significant difference between secondary school teachers towards technology with respect to the types of schools.
3. There will be no significant difference between male and female teachers of secondary school towards using technology.
4. There will be no significant difference on the basis of medium in secondary school teachers towards using technology.

VARIABLES OF THE STUDY

Independent variables - Secondary school teachers, Technology.

Dependent variables - Attitude of secondary school teachers.

RESEARCH DESIGN

The present study is conducted through Descriptive Survey Technique which involves the collection of primary data about subjects through the use of a questionnaire.

DATA COLLECTION

Population: Government secondary school teachers of Patna district.

Sample: The sample consist of 200 male and 200 female teachers i.e.,400Secondary school teachers.

Sampling technique: purposive sampling technique and stratified sampling technique.

TOOL

Used Questionnaire/ statement for attitude test prepared by Dr. S. RajShekhar Annamalai University, Head department of education.

STATISTICAL TECHNIQUE

- Mean
- Standard Deviation
- T-test

Delimitation of the study

- This study will be only on secondary school teachers.
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Table 1 Showing types of schools

No. of Schools	N	%
Government Schools	260	65
Private Schools	140	35
Total	400	100

Table 2 Showing gender

Gender (Government)	N	%
Male	186	69
Female	84	31
Total	270	100

Table 3 Showing gender

Gender (Private)	N	%
Male	99	76
Female	31	24
Total	130	100

Table 4 Showing medium

Medium	N	%
English	338	84
Hindi	62	16
Total	400	100

Table 5

Group	N	Mean	S. D	M.D	S. E	t-value
Government	260	58.32	5.527	0.519	0.592	0.877
Private	140	57.80	5.868			
Total	400					

, NS = Not significant

The obtained 't' - value of 0.877, which is shown in the Table- 5, is insignificant. The value indicates that there is no significant mean difference between the students of Government and Private Institutions on the perceived factors of Technology Enabled Learning namely: Self-Efficacy. The Government Institution group of students has scored higher mean value of 58.32 compared to Private Institution group (Mean = 57.80).

Therefore, the proposed hypothesis (No. 2.a(I)) stated that "Students of Government and Private Institutions do not differ on the perceived factors of Technology Enabled Learning namely: Self-Efficacy" is accepted.

Table 6

Group	N	Mean	S. D	M.D	S. E	t- value
Government	260	45.32	4.292	0.187	0.453	0.413
Private	140	45.13	4.364			
Total	400					

, NS = Not significant

The obtained 't' - value of 0.413, which is shown in the Table - 6, is insignificant. The value indicates that there is no significant mean difference between the students of Government and Private Institutions on the perceived factors of Technology Enabled Learning namely: Classroom Learning. The Government Institution group of students has scored higher mean value of 45.32 compared to Private Institution group (Mean= 45.13).

Therefore, the proposed hypothesis (No. 2.a(II)) stated that "Students of Government and Private Institutions do not differ on the perceived factors of Technology Enabled Learning namely: Classroom Learning" is accepted.

The result of the above study is confirmed with Kasongo Kalanda (2005) and the study reported that a positive relationship exists between attitude towards technology and Classroom learning environment.

Table 7

Group	N	Mean	S. D	M.D	S. E	t- value
Government	260	43.38	4.021	0.038	0.429	0.088
Private	140	43.34	4.225			
Total	400					

, NS = Not significant

The obtained 't' - value of 0.088, which is shown in the Table - 7, is insignificant. The value indicates that there is no significant mean difference between the students of Government and Private Institutions on the perceived factors of Technology Enabled Learning namely: Attitude towards Technology. The Government Institution group of students has scored higher mean value of 43.38 compared to Private Institutions group (Mean = 43.34).

Therefore, the proposed hypothesis (No. 2.a(III)) stated that "Students of Government and Private Institutions do not differ on the perceived factors of Technology Enabled Learning namely: Attitude towards Technology" is accepted.

Table 8

Group	N	Mean	S. D	M.D	S. E	t- value
Government	260	33.21	3.844	0.243	0.413	0.589
Private	140	32.96	4.121			
Total	400					

, NS = Not significant

The obtained 't' - value of 0.589, which is shown in the Table - 28, is insignificant. The value indicates that there is no significant mean difference between the students of Government and Private Institutions on the perceived factors of Technology Enabled Learning namely: Learning Feasibility. The Government Institution group of students has scored higher mean value of 33.21 compared to Private Institutions group (Mean = 32.96).

Therefore, the proposed hypothesis (No. 8) stated that "Students of Government and Private Institutions do not differ on the perceived factors of Teleology Enabled Learning namely: Learning Feasibility" is accepted.

SUMMARY

The major Objective of the present study is to assess the importance of certain personal variables of college students namely: Gender, age, Qualification, Medium of study in the school, Year of the study, Religion, Community, Nativity, Parental Education (father & mother), Parental occupation (father & mother) and students' knowledge on computer on the factors of attitude towards Technology Enabled Learning (TEL). The present study also envisages in explaining the impact of independent variable of Technology Enabled Learning on the dependent variable of academic performance among the students of Hotel Management.

A sample of 400 students (Male = 285, Female = 115) were randomly selected from 2 institutions namely: Government and Private in the city of Chennai. Their age ranges from 17 to 21 years with the mean age of 18.5 years. The researcher has selected the Descriptive type of research design, which is highly suitable for the present study.

During the pilot study, 50-items of Technology Enabled Learning questionnaire was developed by factor analysis method and it emerged with 5- independent factors namely:

1. Self-Efficacy
2. Classroom Learning
3. Attitude towards Technology
4. Learning Feasibility and
5. Academic Activities.

CONCLUSIONS

The results obtained from the study revealed that the identification of various factors related to students' attitude towards Technology Enabled Learning may help the faculty in developing appropriate strategies to deliver the classroom teaching learning in an effective manner. The identified 5 - factors such as:

Self-efficacy, Classroom learning, attitude towards technology enabled learning, learning feasibility and Academic achievement which are relevant in day- to- day learning experiences of the students.

The results of the few studies show that there is strong relationship among the study variables. In this study, the development of the Questionnaire would enlighten to identify students' attitude towards Technology usage in the classroom.

Further, the results of the present study show that irrespective of various personal variables of students, almost all of them indicated a "positive" type of attitude in usage of Technology Enabled learning in the classroom. Also, significant relationship was found among all the 5 factors of Technology Enabled Learning with students of personal variables.

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