A COMPARATIVE STUDY OF ATTITUDE OF SECONDARY SCHOOL TEACHERS TOWARDS THE USAGE OF TECHNOLOGY IN CLASSROOMS

Mukhtar Ahmad Wani[1] & Altaf Rasool Shaksaaz[2]

[1]Research Scholar, Department of Educational Studies, Jamia Millia Islamia, New Delhi
[2]M.Ed Student, Department of Educational Studies, Central University Jammu, J&K
E-mail: wanimukhtar913@gmail.com

Abstract

The use of technology in classroom can add value in allowing the students to develop higher order thinking skills, increased students motivation, improved teaching and learning and higher level of students achievement. The present study examines the attitude of secondary school teachers towards the usage of technology in classroom with respect to gender, locality, subject and experience of teaching. Descriptive survey method was employed in the present study. 116 (48 Male & 68 Female) secondary school teachers were selected as samples through the purposive sampling technique from eight secondary schools in Jammu. Data was collected through the Attitude Scale developed by the researcher. Mean, Standard Deviation and t-test were employed for the analysis of the data. The results of the study revealed that there is no significant difference in the attitude of male and female secondary school teachers towards the usage of technology in classroom. Rural and urban teachers differ significantly in their attitude towards the usage of technology in classrooms. It also showed that secondary school teachers with below 5 years teaching experience and above 5 years teaching experience do not differ significantly in their attitude towards the usage of technology in classrooms. Science and humanities teachers differ significantly in their attitude towards the usage of technology in classrooms.

Keywords: Attitude, Classroom, Technology, Secondary School Teachers.

Introduction:

Attitude is an important concept in social judgments and behaviors and thus, is one of the most important concepts in decision making (Venkatesh et al., 2003).Use of technology is intended to enable teachers to facilitate learning more effectively and enhance student's understanding of concepts. Technology can have a reciprocal relationship with teaching. The emergence of new technologies pushes educators to understanding and leveraging these technologies for classroom use, at the same time, the on-the-ground implementation of these technologies in the classroom can (and does) directly impact how these technologies continue to take shape. While many new technologies have emerged throughout history, so has the cry for educators to find meaningful ways to

incorporate these technologies into the classroom – be it the typewriter, the television, the calculator, or the computer. And while some professional educators may have become numb to this unwavering 'call' – and for good reason – it is crucial to consider that the excitement over games and social networking isn't just business and industry "crying wolf." Indeed, those previous technologies have a powerful place in instruction and the classroom; but without them, strong lessons and learning objectives can still be achieved. With these more recent technologies, we think educators should take the call, even if only on a trial basis.

Undoubtedly, without these recent technologies (i.e. digital games, Web 2.0, etc.) in the classroom, strong lessons can still be achieved, but there's a sharp disconnect between the way students are taught in schools and the way the outside world approaches socialization, meaning-making and accomplishment. It is critical that education not only seek to mitigate this disconnect in order to make these two "worlds" more seamless, but of course also to leverage the power of these emerging technologies for instructional gain.

Significance of the Study:

The use of technology can add value in allowing students to develop higher-order thinking skills. Increased students motivation, improved teaching and learning and higher level of students achievement. Technology may play an important role in closing the achievement gap. It goes without saying, technology empowers students; especially those who have limited experience. Technology based assignments allow students more freedom which allows students to think critically about their learning and investigate outside the basic assignments in order to make it meaningful to them and their classmates with the assistance of technology. Teachers and students can both improve their learning and refine skills necessary for tomorrow. It goes without saying that all paired with students can show positive achievements gain when paired with effective classroom instruction. Through professional development and follow up support, teachers can provide the valuable classroom instruction needed for students to succeed. In the light of the above discussion, the investigator decided to study the Attitude of secondary school teachers towards the usage of technology in classroom. The need was also felt because it depends on the attitude of the teacher who has to use the different pedagogic practices inside the classroom.

Objectives

1. To find significant gender differences in the attitude of secondary school teachers towards the use of technology in classroom.
2. To find significant differences in the attitude of rural and urban secondary school teachers towards the use of technology in classroom.
3. To find significant differences in the attitude of science and humanities Secondary school teachers towards the use of technology in classroom.
4. To find significant difference in the attitude of secondary school teachers having experience up to 5 years and more than 5 years towards the use of technology in classroom.

Hypotheses

1. There is no significant gender difference in the attitude of secondary school teachers towards the use of technology in classroom.

2. There is no significant differences in the attitude of rural and urban secondary school teachers towards the use of technology in classroom..
3. There is no significant difference in the attitude of secondary school science and humanities teachers towards the use of technology in classroom.
4. There is no significant difference in the attitude of secondary school teachers having teaching experience below 5 year and above than 5 years towards the use of technology in classroom.

Methodology

This study employed a descriptive survey design. Descriptive survey design was used to gather accurate information on the attitude of secondary school teachers towards the usage of technology in classroom.

Sampling

Keeping in view the objectives of the study the researcher selected the sample through the purposive sampling technique. A total sample of 116 (48 Male and 68 Female) secondary school teachers were selected as sample.

Tools

Demographic information blank and the attitude scale were used for data collection. The measurement of attitude towards technology was assessed by a scale developed by the researcher. It consists of 35 statements. The scoring procedure of the Attitude scale used in the research is very simple. Favorable statements are scored 5, 4, 3, 2, 1 for SA, A, UD, D and SD respectively and unfavourable statements are scored 1, 2, 3, 4, 5 for SA, A, UD, D and SD respectively.

Analysis and Interpretation

The researcher calculated the mean, standard deviation, standard error of mean values, standard error of difference between mean and finally the t ratios were computed.

Hypothesis-I

The mathematical information related to the testing of hypothesis stating, there will be no significant gender differences in the attitude of secondary school teachers towards the use of technology in classroom is indicated in the following table 1:

Table 1:

Mean score values of male and female teachers using technology in classroom

S. No.	Gender	Number	Mean	S.D	t-value	Significance
1	Male	48	135.19	10.51	0.32	NS
2	Female	68	134.55	10.52		

The above table shows that the calculated value of t=0.32 is less than the table value for degree of freedom 114 at 0.05 level of significance. It reveals that there is no significant gender difference in the attitude of secondary school teachers towards the usage of technology in classroom. Hence the hypothesis stating that

there is no significant gender difference in the attitude of secondary school teachers towards the usage of technology in the classroom is accepted.

Hypothesis-II

The mathematical information related to the testing of hypothesis, stating, there is no significant difference in the attitude of rural and urban secondary school teachers towards the use of technology in classroom is shown in the table 2:

Table 2

Mean scores values of rural and urban teachers using technology in classrooms

S.NO	Locality	Number	Mean	S.D	t-value	Significance
1	Rural	35	132.21	9.76	2.74	S
2	Urban	81	137.96	11.65		

The above table 2 shows that the calculated value of t=2.74 is greater than the table value for degree of freedom 114 at 0.01 level of significance. It reveals that there is significant difference in the attitude of rural and urban secondary school teachers towards the usage of technology in classroom. Hence the hypothesis stating that there is no significant difference in the attitude of rural and urban secondary school teachers towards the usage of technology in the classroom is rejected.

Hypothesis-III

The mathematical information related to the testing of hypothesis, stating, there is no significant difference in the attitude of secondary school teachers having experience up to 5 years and more than 5 years towards the use of technology in classroom is indicated in the table 3:

Table 3

Mean score values of teachers with experience up to 5 years and more than 5 years.

S.NO	Experience	Number	Mean	S.D	t- value	Significance
1	Up to 5 years	52	138.18	9.30	1.64	NS
2	More than 5 years	64	134.84	12.68		

The table shows that the calculated value of t=1.64 is less than the table value for degree of freedom 114 at 0.05 level of significance. It reveals that there is no significant difference in the attitude of teachers having experience up to 5 years and more than 5 years of secondary school teachers towards the usage of technology in classroom. Hence the hypothesis stating that there is no significant difference in the attitude of secondary school teachers having experience up to 5 years and more than 5 years towards the usage of technology in the classroom is accepted.

Hypothesis-IV

The mathematical information related to the testing of hypothesis, stating, there is no significant difference in the attitude of secondary school science and humanities teachers towards the use of technology in classroom is indicated in the table 4:

Table 4

Mean score values of Science and Humanities teachers using technology in classroom

S.NO	Subjects	Number	Mean	S.D	t-value	Significance
1	Science	57	133.71	9.85	2.35	S
2	Humanities	59	138.55	12.28		

The table shows that the calculated value of t=2.35 is greater than the table value for degree of freedom 114 at 0.05 level of significance. It reveals that there is significant difference in the attitude of science and humanities teachers towards the use of technology in classroom. Hence, the hypothesis stating that there is no significant difference in the attitude of science and humanities teachers towards the use of technology in the classroom is rejected.

Findings

In the light of analysis and interpretation of the data as given above, the investigator arrived at the following results:

1) The Male and Female teachers do not differ significantly in their attitude regarding the usage of technology in classroom.
2) The Rural and Urban teachers differ significantly in their attitude towards the usage of technology in classroom.
3) The teachers having experience below 5 years and above 5 years do not differ significantly in their attitude towards the usage of technology in classroom.
4) The science and Humanities teachers differ significantly in their attitude towards the usage of technology in classroom.

Conclusion

Integrating technology in the classroom should be a growing concern within the schools. The general attitude and awareness of not moving ahead with incorporating technology in the classroom is shortsighted. The public needs to be aware that their attitudes and actions do make a difference to the educational world. Movement should be taken today to work towards proper implementation of technology within the schools. The courses offered via EDUSAT network are based on a learner centered approach to education in which teachers and students share responsibility and participation in learning and teaching. Courses delivered via EDUSAT can meet immediate learning needs as well as help learners become more self-directed in their ongoing learning. The whole process of using the latest methods and new ways of educational technology depends upon the attitude of the teacher. The teachers must have the positive attitude for the utilization of different technologies in the classrooms.

Implications

The educational implications of the present study are as under:-

1. The present study has implications for administrators, principals and headmasters of the educational institutions that they can take necessary initiatives for developing willingness among the teachers to the use of technology in classroom.
2. It will also benefit the content designer to design appropriate content.
3. It will also help the institutional heads to plan and conduct some training courses for students and teachers providing specific emphasis on technology.
4. The findings have implications for research scholars that they can conduct further research work related to the topic.
5. The present study has implications for the teachers, to refine their attitude so that right kind of gap between programmes and desirable outcomes can be taken out.

The study, therefore, recommends that the government through Ministry of Education should adopt appropriate measures to further improve the teachers' positive attitudes towards technology use in classrooms.

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