Research Article

ATTITUDES OF SECONDARY SCHOOL TEACHERS TOWARDS SMART CLASSROOM IN WEST BENGAL

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ABSTRACT

A smart classroom is a classroom with enhanced educational technology that uses audio, video, animations, graphics and other multimedia to improve teaching and learning for both teachers and students. This study adopted a descriptive survey research designed to investigate Teachers attitude towards the use of smart classroom at Nadia District in West Bengal. The population of the study was Nadia District. A sample of 300 teachers was used in this study. A sample random sampling was used for the study. The instrument used in this study to collect data from respondents was structured questionnaire constructed by the researcher based on the five point likert scale. Mean, Standard Deviation and 't' test were used to answer the hypotheses. The study revealed that there is significant difference in secondary school teacher's attitude towards smart classroom with respect to their locality and their stream. Out of 300 teachers 60.66% teachers have high level attitude towards smart class room.

Keywords: Smart Classroom, Educational Technology, Attitude, Secondary, Likert Scale, Animation.

INTRODUCTION

Human civilization is progressing. Technology changes the world. It has also brought changes in the world of education. Technology is transforming India's educational system. Classrooms are no longer limited to chalkboards and textbooks .Smart classroom utilize education technology to enhance the learning experience and engage students like never before.

"In India there's a big push from the Ministry of Human Resource Development to create around 3 lakh smart classrooms in government schools by 2023, costing about   2.4 lakh per classroom. This move is expected to have a huge impact on the smart classroom market in India." (smart class room :Redefining Education)

"A smart classroom is a classroom that has an instructor station equipped with a computer and audio- visual equipment, personal computer, overhear projector, wireless internet access, digital versatile disk player, smart board" (Perret, 2008) Smart classes are equipped with a variety of engaging educational technology tools such as smart board, computer or laptop, projector, pen drive, microphone, speakers, (T.Thilagvathy, 2017) smart podium, overhead projector, VCD, DVD. A smart classroom has brought radical changes in the teaching learning process. A smart classroom is invented by Edu-comp. (Parveen, 2021) A smart class room is a digital initiative pioneered. A smart classroom provides a very systematic way of learning through curriculum and well equipped computer classes.

The performance of teachers greatly depends upon their attitude. A positive attitude makes the work not only easier but more satisfying also and professionally rewarding. The true implementation of the smart classroom depends upon active participation teachers. So the knowledge of the attitude of teachers will be helpful for the implementation.

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REVIEW OF RELATED LITERATURE

Kasumu (2023) revealed that smart classrooms can even interact with the visuals utilizing cutting –edge technology like virtual reality, they also increase teaching and learning flexibility and improve the in class experience for students.

Sangita Rani (2019) examined that there is no significant difference in secondary school teachers attitude towards smart classroom with respect gender, locality, academic qualification teaching experience.

Chandini (2016) reported that there is a significant difference in secondary school teachers attitude towards the use of computers in education with respect to their age.

Yadav and Reena (2015) examined that teachers of urban area school showed more positive attitude towards use of ICT as compared to rural area school teacher.

METHODOLOGY

Survey method was used for this study.

Population and Sample: Population of the study is consisted all the secondary teachers of Nadia Districts in West Bengal. Nadia Districts is divided with four sub-divisions. Namely, Krishnagar Sadar, Ranaghat, Kalyani and Tehatta. Samples are randomly selected from one school of each sub-division through lottery method.

Tool - In this study a self made questionnaire was made by researcher. Questionnaire has 40 statements, each statements has five responses. The responses are Strongly agree (SA), Agree(A),Disagree(D),Strongly Disagree(SD) and Undecided. The assigned value point are 5,4,3,2,1 for positive statements and in reverse order for the negative statement.

Data collection and analysis: Data were collected from the sample with questionnaire. In this study researcher employed Descriptive Statistics (Mean And Standard Deviation) and Inferential Statistics (t-test) were used to analyze the data from the sample.

HYPOTHESES OF THE STUDY

1. There is no significant difference between male and female teachers attitude towards smart classroom
2. There is no significant difference between different kinds of Teaching Experience of Teachers towards smart classroom
3. There is no significant difference between UG with B.ED and PG with B.ED school teacher's attitude towards smart classroom
4. There is no significant difference between   school teachers attitude towards smart classroom working in urban and rural areas
5. There is no significant difference between school teachers attitude towards smart classroom in respect to type of school
6. There is no significant difference between school teacher's attitudes toward smart classroom in their subject stream.

Data Analysis: In the present study all mean, Standard Deviation, and 't' values are measured using Microsoft Excel -2010 statistical Software.

Table A: Level of Attitude

Sl. No	Raw score	Level of attitude	Numbers of teachers	Percentage
1.	101-125	High	182	60.66%
2.	76-100	Moderate	90	30%
3.	50-75	Low	28	9.33%

It is observed that out of 300 teachers 60.66% teachers have high level attitude, 30% teachers have moderate attitude and 9.33% have low level of attitude towards smart classroom.

Fig-1: Show the level of Teachers Attitude
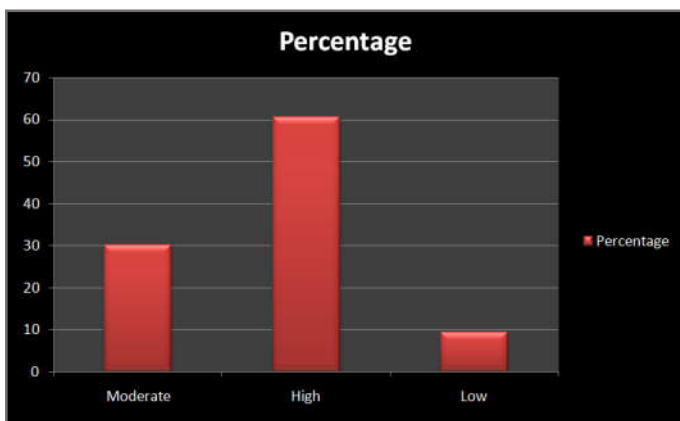
Table B: Mean, SD and 't' values of Variables

Variables	Sub Group	N	Mean	SD	"t"	Remarks
Gender	Male	150	29.43	4.02	2.17	Accepted
	Female	150	33.15	2.73		
Locality	Rural	150	42.01	4.81	5.79	Rejected
	Urban	150	48.63	4.11		
Qualification	UG with B.ED	77	31.30	5.19	0.86	Accepted
	PG with B.ED	223	31.21	3.48		
Type of School	Co-eds	150	40.10	7.71	1.09	Accepted
	Others	150	39.14	7.46		
Stream	Arts	200	30.48	4.06	4.07	Rejected
	Science	100	35.21	3.99		
Teaching Experience	Above 10years	150	25.98	3.88	1.09	Accepted
	Below 10 years	150	26..44	3.79		

't'=1.97 at 0.05level of significance

't'=2.54at 0.01 level of significance

1. The mean attitude score of male teachers toward smart classroom is M=33.15 and female teachers is M=33.15. The computed 't' value is 2.17. The Obtained 't' value is higher than the table value at 0.05 level of significance. So the null hypothesis is accepted. The results indicate that there is no significance difference between the mean attitude score of male and female teachers. Hence we can say that gender does not influence the attitude of teachers towards smart classroom.
2. The mean attitude score of rural teachers toward smart classroom is M=42.01 and urban teachers is M=48.63. The computed 't' value is 5.79. The obtained 't' value is higher than the table value at 0.05 level of significance. So the null hypothesis is rejected. The results indicate that there is significance difference between the mean attitude score of rural and urban teachers. We can say that locality influence the attitude of teachers towards smart classroom.
3. The mean attitude score of UG with B.ED teachers toward smart classroom is M=31.30 and PG with B.ED teachers is M=31.21. The computed 't' value is 0.86. The Obtained 't' value is lower than the table value at 0.05 level of significance. So the null hypothesis is accepted. The results indicate that there is no significance difference between the mean attitude score of qualification of teachers. Hence we can say that qualification does not influence the attitude of teachers towards smart classroom.
4. The mean attitude score of Co-eds teachers toward smart classroom is M=40.10 and others school teachers is M=39.14. The computed 't' value is 1.09. The Obtained 't' value is lower than the table value at 0.05 and 0.01level of significance. So the null hypothesis is accepted. The results indicate that there is no significance difference between the mean attitude score of Co-eds and other school teachers. Hence we can say that type of school does not influence the attitude of teachers towards smart classroom.
5. The mean attitude score of Arts teachers toward smart classroom is M=30.48 and female teachers is M=35.21. The computed 't' value is 4.07. The Obtained 't' value is higher than the table value at 0.05 level of significance. So the null hypothesis is rejected. The results indicate that there is significance difference between the mean attitude score of male and female. Hence we can say that stream of teachers influence the attitude of teachers towards smart classroom.
6. The mean attitude score of above 10 years teachers toward smart classroom is M=25.98 and below 10 years teachers is M=26.44. The computed 't' value is 1.09. The Obtained 't' value is lower than the table value at 0.05 level of significance. So the null hypothesis is accepted. The results indicate that there is no significance difference between the mean attitude score of teaching experience of teachers. Hence we can say that experience of teachers does not influence the attitude of teachers towards smart classroom.

Findings of the study

- Significant differences are found in relation to category locality i.e. residential background and different stream of the school teacher's attitude toward smart classroom.

- No significant differences are found in relation to gender, type of school, Academic qualification and teaching experience of the secondary school teacher's attitude towards smart classroom.

From the result it is revealed that

- The attitude of teachers located in urban areas is much better than rural areas teachers' attitude towards smart classroom.
- Attitude of science department teachers is slightly better than arts department towards smart classroom.

CONCLUSION

The present age is the age of technology. Technology is also changing the field of education. Smart class is to days demand. It is effective in making some traditional methods more productive. For instance, the teacher, while teaching a lesson volcano's, tsunami etc. with supplement the information gives in book by showing a video of how does hot lava come out of a volcano. We all know that if we teach with audio visual aids then learning is very effective. If smart class room can be created in every school it will bring a huge change in the world of education. In countries like our where electricity has not reached everywhere today. The use of smart class rooms there is just a sky of imagination. However we are hopeful that one day smart classrooms will be built in every school.

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