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# Smart Classroom Knowledge of the Higher Secondary Teachers

Dr. P. Vaiyapuri Raja, Ph.D., Mr. N. Saveetha,

Principal, Sri Balaji College of education, Arcot Road, ACS Nagar, Irumbedu, Arni Taluk, Tiruvannamalai district,  
Tamilnadu, India

Assistant Professor, Sri Balaji College of education, Arcot Road, ACS Nagar, Irumbedu, Arni Taluk,  
Tiruvannamalai district, Tamilnadu, India

**ABSTRACT:** The role of the teachers in educating the children has gained nowadays a paramount importance. On one side the classrooms are overcrowded with overloaded syllabi where the pupils are expected to gain knowledge and on other side the role of teachers has become significant to develop interest and meaningful understanding amongst the students. This study was conducted to study the smart classroom knowledge of the higher secondary teachers in Thiruvannamalai District. Random sampling technique has been used in the selection of the sample of 300 higher secondary teachers working in the higher secondary schools situated in Tiruvannamalai District of Tamilnadu, India. The Smart Classroom Knowledge Test (SCRKT) constructed and validated by Prabhu, H., and Vaiyapuri raja, P., (2019) has been used and the findings of the investigation reveals that the majority of the higher secondary teacher shows average level of smart classroom knowledge. Moreover, the sex and the teachers' medium of instruction show a significant difference in smart classroom knowledge whereas their school locality and residential area do not show significant difference in smart classroom knowledge.

**KEYWORDS:** Smart classroom knowledge, Higher secondary teachers.

### I. INTRODUCTION

The traditional approach of lecture and note taking has lost its effectiveness as the modern day around education grows. To grow academically it must be considered that differentiated modalities of teaching and learning are necessary to implement deeper levels of growth and conceptual development. Since every student is not interested in all subject matters. However, it is the responsibility of the education system to employ a variety of opportunities for the students to gain interests, orchestrating academic growth and progression throughout childhood and adolescence.

An alternative process or method of teaching has to be adopted, in this fast developing world, where knowledge explosion has been taking place every day in every sphere of life. It is unreasonable to expect that spoken or written words alone to convey the volume of relevant information to the learner. The selection of teaching method and techniques depends upon the nature of the test, learning objectives on one side and entering behaviour of the students on the other side. Information and Communication Technology is an important instrument, which can transfer the present isolated teacher and book centred learning environment into a rich learning environment. To make teaching-learning environment richer and more effective, teachers through power point presentations deliver their lessons. This involves a detailed and complex preparation on the part of the teacher. The typical classroom was once characterized by students sitting through hour long teaching monologues. Now, technology is making life easier for both educators and students. New method of teaching has been introduced which is publically known as Smart Class.

The days where there in which learning used to be monotonous with a teacher teaching using the boring chalk-board. Now the learning is fun and entertaining with the changes in the teaching system. With the advent of the Smart Class learning the classroom has become more enjoyable. In simple terms, an innovative and meaningful use of

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technology in the way of teaching has enriched learning because it engages the students and the teachers and creates a connection between them by making the class active.

## II. LITERATURE REVIEW

Jeya Selva Kumari, T., and Denisia, S.P., (2013) conducted a study on emerging technology of smart class teaching for secondary school teachers. The use of emerging technology of smart class teaching is very important both for teachers and students. Its overall effectiveness needs to be enhanced by better planning and implementing of soft skills of multiple intelligences. More research is needed to discover and the way of using emerging technology of smart class teaching for secondary school teachers. The rate at which multiple intelligences will be used to enhance education in smart class and in other fields depends mainly upon state and national monetary commitment, followed by the willingness of individual schools to provide goods and services. This technological approach of emerging technology of smart class teaching for secondary school teachers will fulfill the gaps in students' knowledge, understanding, and application.

Anita Menon, (2015) conducted a study on effectiveness of smart classroom teaching on the achievement in chemistry of secondary school students. . The study investigated 320 Class IX students from Amritsar city. Achievement test in Chemistry of 50 items was used to collect the data. Experimental group was taught in smart classrooms and control group was taught by conventional mode of instruction. The results revealed that students achieved higher when taught in smart classes as compared to conventional mode of instruction. Learning styles of students did not affect their achievement in experimental and control group. No interaction effect of instructional strategies and learning style was found.

## III. METHODOLOGY

Normative survey method has been employed in the present study. The following are the objectives formulated for the present study:

1. To study the smart classroom knowledge of the higher secondary teachers.
2. To study if there is any significant difference in smart classroom knowledge between the male and female higher secondary teachers.
3. To study if there is any significant difference in smart classroom knowledge between the higher secondary teachers working in the school located in the urban area and in the rural area.
4. To study if there is any significant difference in smart classroom knowledge between the higher secondary teachers residing in the urban area and in the rural area.
5. To study if there is any significant difference in smart classroom knowledge between the higher secondary teachers where medium of instruction was in the English medium and in the Tamil medium.

Random sampling technique has been used in the selection of the sample of as many as 300 higher secondary teachers working in Tiruvannamalai district of Tamilnadu, India.

The Smart Classroom Knowledge Test (SCRKT) constructed and validated by Prabhu, H., and Vaiyapuriraja, P., (2019) has been used in this study. This test consists of 28 multiple choice questions with four alternatives. The correct answer bears the score 1 and the wrong answer 0. The total score one can obtain in this test is 28.

The level of the smart classroom knowledge test has been given below

Low level of smart classroom knowledge	Upto 7
Average level of smart classroom knowledge	Above 7 upto 21
High level of smart classroom knowledge	Above 21

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## IV. RELIABILITY AND VALIDITY

The investigator found the reliability of the scale by using test re test 0.81 and smart class room knowledge test intrinsic validity was found to be 0.90. Thus the smart class room knowledge test has validity and reliability.

### STATISTICAL TECHNIQUES EMPLOYED:

The mean and standard deviation for the entire sample and its sub-samples were computed for smart classroom knowledge test scores. The test of significance ('t' test) was used in order to find out the significance of the difference between the means of the smart classroom knowledge test score. SPSS 11.5 was used to compute the smart classroom knowledge test scores and the results were furnished in the Table1.

**TABLE 1**  
**THE MEAN, SD AND 't' VALUE OF THE SUB SAMPLES OF THE SMART CLASSROOM KNOWLEDGE TEST SCORES**

S.NO	Samples	Sub-Samples	N	MEAN	SD	't' Value	Significant at 0.05 Level
1	Entire sample		300	14.3933	2.6194		-
2	Sex	Male teachers	148	14.7568	2.1965	2.39	Significant
		Female teachers	152	14.0395	2.9384		
3	School locality	Rural area	170	14.2588	2.8143	1.04	Not Significant
		Urban area	130	14.5692	2.3391		
4	Residence	Rural area	156	14.5000	2.4110	0.72	Not Significant
		Urban area	144	14.2778	2.8320		
5	Medium of instruction	Tamil medium	142	13.2857	3.0943	2.56	Significant
		English medium	158	14.5736	2.4944		

### FINDINGS OF THE STUDY

The following are the important findings from this investigation:

1. Majority of the higher secondary teachers show average level of smart classroom knowledge.
2. There is a significant difference in smart classroom knowledge between the male and female higher secondary teachers.
3. There is no significant difference in smart classroom knowledge between the higher secondary teachers working in the schools located in the urban areas and in the rural areas.
4. There is no significant difference in smart classroom knowledge between the higher secondary teachers residing in the urban areas and in the rural areas.
5. There is a significant difference in smart classroom knowledge between the higher secondary teachers whose medium of instruction was in the English medium and in the Tamil medium.

## V. CONCLUSION

This study has revealed that majority of the higher secondary teachers show average level of smart classroom knowledge. This will help the policy makers to design the curriculum in such a way that it will help the teacher to teach the subject in an effective manner and maintain pace with the modern education.

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