



## ORIGINAL RESEARCH PAPER

## Pedagogical Science

### RELATIONAL STUDIES ON SMART CLASSROOM AND COMMUNICATION SKILL AMONG SECONDARY TEACHER EDUCATION STUDENTS

**KEY WORDS:** Smart Class, Communication Skill, Teaching and classroom.

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#### ABSTRACT

The present study is smart classroom and communication skill among B.Ed trainees has adopted normative survey method. For this study, the investigator has used simple random sampling technique for collecting the sample from the population. The stratification has been done on the basis of gender, nativity of the learner, optional subject and laptop availability. Attitude towards smart classroom questionnaire prepared and developed by the investigator was used for collecting the data. Assess the communication skill standardized questionnaire used in the present study. The sample consists of 850 B.Ed college students from Cuddalore district. The major findings of the study (1) There is significant difference between male and female college students in their smart classroom. (2) There is significant difference between rural and urban college students in their communication skill. (3) There is significant relationship between smart classroom and communication skill of B.Ed students.

#### Introduction

Worldwide there has been a strong push to get educational technology into the hands of teachers and students - yet it remains a reality that most teachers across the world continue to struggle with their day to day challenges in classrooms and remain completely un-impacted by Technology even today. The Primary reason for this is that most technology integration initiatives developed for schools ignore to look at the specific pain areas and real life challenges that teachers experience in classrooms. Not only should the solution address the pain areas of the teacher but also follow a path which blends seamlessly with their own individual traditional teaching styles. There is a need to provide them with digital content that is mapped precisely to curriculum. The method also needs to be simple, minimally invasive, user friendly and have minimal dependence on teachers own skills. Equally essential is ongoing handholding support from training to maintenance.

Smart class is a digital initiative of Educomp, which is rapidly transforming the way teachers teach and students learn in schools with innovative and meaningful use of technology. Powered by the world's largest repository of digital content mapped to Indian School Curriculum, smart class brings in technology right next to the blackboard for teachers in the classrooms. Students learn difficult and abstract curriculum concepts watching highly engaging visuals and animations. This makes learning an enjoyable experience for students while improving their overall academic performance in school. Smart class also enables teachers to instantly assess and evaluate the learning achieved by their students in class with an innovative assessment technology- smart assessment system - designed by Educomp.

#### Smart Class

Smart Class is a comprehensive solution designed to assist teachers in meeting with their day to day classroom challenges and enhancing students' academic performance with simple, practical and meaningful use of technology. Smart Class provides teachers with instant access to multimedia content and instruction materials mapped exactly to the specific curriculum guidelines for use in class. It also enables teachers to instantly assess and evaluate the learning achieved by their students in class with innovative use of technology. Smart class helps teachers to ensure that every child in the class is learning, given the wide diversity of learning styles in the classroom. It is also highly efficient in maintaining student's interest and engagement in learning inside the classroom. Smart Class simplifies the problems of teaching abstract curriculum concepts that are difficult for students to visualize or relate to through the provision of three-dimensional, interactive multi-media modules.

#### Need for the Study

School and higher education systems are straining under budget

cuts. The demand for knowledge workers with specialized skills is growing by 11 percent a year. Many jobs will require lifelong training and a continuous updating of skills. And the education industry has grown increasingly complex and difficult to quantify, as students pursue a variety of [alternative learning paths](#). **The good news is that there have been advances in education technology cloud computing, open source systems, virtualization, analytics that can help our systems refresh outdated infrastructures with new functionality. They can become more interconnected, instrumented and intelligent. In a word, smarter and it is already happening.**

**Many schools have closed, and funding for public education has been eroded. Through a [Reinventing Education](#) grant, IBM is providing a solution that will enable teachers and education experts to interconnect systemically for the first time across the state, sharing high-quality content and collaborating on critical topics. In recent years, computer technology has become a popular tool used to improve the education of students in all the countries. Technology has affected us in every aspect of our lives from communication to education. The days of gurukul far behind us it is time now for students to learn techs way. Introducing the concept of smart class where teaching happens through digital instruction materials, 3D animated modules and videos. More than 1000 schools in India are successfully using smart class.**

Students need practical and deeper knowledge about the subject they are learning in school and college. For better learning from teachers, they need to ask the question and they have to discuss their subjective and objective doubts. When teachers understand where they are confused about the subject then they can teach in their style, it will help students get high marks. Most of the students do not ask question because of fear, hesitation and low confidence. Communication skills help them to listen, understand the point of view of teachers in the class. After listening and understanding what teachers are speaking about students can ask better questions with confidence and it will help them to gain more knowledge. Since, it seems that presentation tools may have had a positive effect on students achievement in many subjects, keeping theses points in mind the present **"Relational Studies on Smart Classroom and Communication sSkill Among Secondary Teacher Education Students"** was undertaken.

#### Statement of the Problem

Teacher is the undisputed pivot in the complex system of education that operates anywhere around the world and despite the emergence of high end information and communication technologies, they continues to enjoy this key position in the teaching learning process. Place of teacher is particularly of paramount significance in societies like ours where most of the learners still depend for their education entirely or predominantly on formal institutional setting which is characterized by face to

face interaction and sharing of experiences with teachers and, occasionally, they resort to the use of technology to supplement and enrich what they learn in schools and colleges under the guidance of teachers. So the present study is entitled **"Relational Studies on Smart Classroom and Communication Skill among Secondary Teacher Education Students"**.

### Definition of the Terms

#### Smart class:

The Smart Class is an innovative technology integration solution that aims to revolutionize the way teachers teach and students learn right inside the classroom.

#### Communication Skill

Communication is any means of contact between two or more people, out of which impressions are made attitudes, are created. "By communications, I mean the simple process of getting information known by one person to the attention of the other people who should have this information..."

#### Secondary Teacher Education Students:

It refers to those who are undergoing teacher training courses in different teacher training college under Tamilnadu Teacher Education University

#### Objectives

1. To find out significant difference between male and female B.Ed., students in their smart classroom and communication skill.
2. To find out significant difference between rural and urban B.Ed., students in their smart classroom and communication skill
3. To find out significant difference between Arts and science B.Ed., students in their smart classroom and communication skill.
4. To find no significant relationship between smart classroom and communication skill among secondary teacher education students.

#### Hypotheses

1. There is no significant difference between male and female B.Ed., students in their smart classroom and communication skill.
2. There is no significant difference between rural and urban B.Ed., students in their smart classroom and communication skill.
3. There is no significant difference between arts and science B.Ed., students in their smart classroom and communication skill.
4. There is no significant relationship between smart classroom and communication skill among secondary teacher education students.

#### Tools Used for the Study

1. Smart Class room scale constructed and validated by the investigator.
2. Communication skill tool prepared and constructed by C. Velmurugan (2012).

#### Method of the Study

Normative survey method is adopted in the present study. The sample is a small proportion of a population selected for observation and analysis. By observing the characteristics of the sample, one can make certain inferences about the characteristics of the population from which it is drawn. (John. N. Best, 2001). The present study consists of 850 teacher trainees from four teacher training colleges in cuddalore educational district. The sample is selected by using simple random sampling technique. The data are necessary for carrying out research. It must be collected with some special instrument or devices. The successful outcome research is mainly depends upon the proper selection of the research tool.

#### Statistical Techniques

Statistical techniques serve the fundamental purpose of the description and inferential analysis. The following statistical

techniques were used in the study. Mean, Standard Deviation, 't' test and coefficient of correlation.

### Data Analysis and Findings

#### Null Hypothesis -1

There is no significant difference between male and female B.Ed., students in their smart classroom.

**Table - 1**

**Difference between Male and Female B.Ed., students in their smart classroom**

Variable	Male (N = 384)		Female (N = 466)		Calculated 't' value	Remarks at 5% level
	Mean	S.D	Mean	S.D		
Smart Classroom	104.38	12	100.77	15	4.27	S

From the table .1 the computed 't' value is found to be 4.27, which is higher than (1.96) at 0.05 level of significance and thus the null hypothesis is rejected. Hence, it is concluded that there is a significant difference between the male and female B.Ed students in their smart classroom.

#### Null Hypothesis - 2

There is no significant difference between rural and urban B.Ed., students in their smart classroom.

**Table - 2**

**Difference between Rural and Urban B.Ed., students in their smart classroom**

Variable	Rural (N =478 )		Urban (N = 372)		Calculated 't' value	Remarks at 5% level
	Mean	S.D	Mean	S.D		
Smart Classroom	104.24	14.22	102.51	12.81	0.549	NS

From the table.2 the computed 't' value is found to be 0.549, which is lower than (1.96) at 0.05 level of significance and thus the null hypothesis is retained. Hence, it is concluded that there is no significant difference between the rural and urban B.Ed students in their smart classroom.

#### Null Hypothesis - 3

There is no significant difference between Arts and Science B.Ed., students in their smart classroom.

**Table - 3**

**Difference between Arts and Science B.Ed., Students in their smart classroom**

Variable	Arts (N =428 )		Science (N = 422)		Calculated 't' value	Remarks at 5% level
	Mean	S.D	Mean	S.D		
Smart Classroom	148.55	21.49	150.94	18.91	1.017	NS

From the table 3 the computed 't' value is found to be 1.017, which is lower than (1.96) at 0.05 level of significance and thus the null hypothesis is retained. Hence, it is concluded that there is no significant difference between the arts and science B.Ed students in their smart classroom

#### Null hypothesis - 4

There is no significant difference between the male and female B.Ed students in their communication skills.

**Table - 4**

**Difference in Communication Skills between the Male and Female B.Ed Students**

Variable	Male (N = 384)		Female (N = 466)		Calculated 't' value	Remarks at 5% level
	Mean	S.D	Mean	S.D		
ommunicati on Skills	115.36	18.89	113.93	18.14	1.51	NS

From the table - 4 the computed 't' value is found to be 1.51, which is lower than (1.96) at 0.05 level of significance and thus the null hypothesis is retained. Hence, it is concluded that there is no significant difference between the male and female B.Ed students in their communication skills.

#### Null hypothesis - 5

There is no significant difference between the rural and urban B.Ed students in their communication skills.

**Table - 5**  
**Difference between the rural and urban B.Ed students in their Communication Skills.**

Variable	Rural (N = 478)		Urban (N = 372)		Calculated 't' value	Remarks at 5% level
	Mean	S.D	Mean	S.D		
Communication Skills	112.20	16.68	118.34	19.55	4.19	S

From the table - 5 the computed 't' value is found to be 4.19, which is higher than (1.96) at 0.05 level of significance and thus the null hypothesis is rejected. Hence, it is concluded that there is a significant difference between the rural and urban B.Ed students in their communication skills.

#### Null hypothesis - 6

There is no significant difference between the Arts and Science B.Ed students in their communication skills.

**Table - 6**  
**Difference between the Arts and Science B.Ed students in their communication skills.**

Variable	Arts (N = 428)		Science (N = 422)		Calculated 't' value	Remarks at 5% level
	Mean	S.D	Mean	S.D		
Communication Skills	110	18.19	111.58	17.93	0.650	NS

From the table - 6 the computed 't' value is found to be 0.650, which is lower than (1.96) at 0.05 level of significance and thus the null hypothesis is retained. Hence, it is concluded that there is no significant difference between the rural and urban B.Ed students in their communication skills.

#### Null hypothesis - 7

There is no significant relationship between smart classroom and communication skill of B.Ed students

Variables	N	Calculated 'r' value	Remarks at 5% level
Smart classroom and Communication Skill	850	0.418	Significant

It is inferred from the above table that there is significant relationship between smart classroom and communication of B.Ed students. Hence the null hypothesis is rejected.

#### Discussion on the result

There is significant difference in smart classroom between the male and female B.Ed students. Compare the mean score female trainees are better smart classroom in male trainees. This may be due to the fact that self interest, motivation and interact freely with the society. Leslie Francis et al (2008) studies also revealed the same findings. There is significant difference in teaching competency communication skill between the school teachers residing in the urban area and in the rural area. This may be due to the fact that the urban teachers learn variety of languages at a time and to use them whenever it is necessary. They have more chances to attend problem-solving ability tests by attending seminars etc. And also urban teachers are not attached more with their peers so as to perform their goodness individually. Jarnar Ahmad and Mohamad Ahmad Khan (2016) studies also revealed the same findings.

#### RECOMMENDATIONS

- Teaching through smart class method can be applied in all

schools.

- Chalk and talk method of teaching should be avoided and new instructional teachings using multimedia package can be introduced.
- In this electronics world multimedia is a boon to all educational institutions at all levels.
- This resource therefore has to be utilized fully for maximizing the leaving processes.
- Smart class can be used to enhance both the theoretical and practical knowledge.
- Teachers and lecturers can be trained to produce multimedia package at various levels.
- In-service training and orientation courses can be provided through multimedia.
- In the smart class, the content can be further simplified as it is split up into small frames.
- In the multimedia package, the content may be presented in a more structural and systematic way.
- Without any prior exposure to the computer, computer software or any other educational software, any pupil can reap the benefits of multimedia package. So more packages may be developed.
- Teacher should encourage feelings of cohesiveness among students through effective communication. This beneficial cohesive feeling can be induced by arranging tours and trips and by taking them to the places where people are in need of external help. Students can be taken to various sports where natural calamities cause dander to common public and can be made to help those sufferers. This sort of experience will give sense of sensitivity and their knowledge to recognize their social environment.

#### Conclusion

The new technology will pave the way to new opportunities and a paradigm shift. Smart class will play a vital role in the educational field by developing self learning educational materials, computer aided instructional course materials, etc. The different author ware will help in developing, designing and production of smart class information sources. It is the right time for the realization of new technology and the smart class programme.

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