Effectiveness of Classroom Management Skills on Science Achievement at Secondary Level

[1]**Naveen Kumar L.C.**

[1] Research Scholar
[1] Department of Education
[1] Bangalore University, Jnanabharathi Campus, Bengaluru 560056, Karnataka, India

Abstract: The purpose of this research is to know the effectiveness of classroom management skills on Science Achievement at secondary level. The present research was followed by descriptive survey method. Giving representation of management type (government, private aided and private unaided), a sample of 210 students were randomly selected from secondary schools in Malur Taluk, Kolar District. Science Achievement was collected from the office records of their respective schools. Teaching Rating Scale developed by Dr. R.C Deva was used by the researcher to know the classroom managerial skills. The collected data was analyzed through correlation and independent 't' test and in all cases the level of significance was fixed at 0.05 level of confidence. From the correlation result it was proved that there was a positive significant relationship between Science Achievement of students and science teacher's effective classroom management skills and 't' test also confirmed that no significant difference in the Science Achievement of secondary school boys and girls. Classroom management rewards system might not work for every situation; it is an effective tool to help motivate students to work on achievement and better actions during class. Differentiating the assignments is a simple way to gain student attention and keep it focused on the classroom. By taking measures to support students, offering different teaching strategies and focus on rigorous educational standards, teachers should keep the class by motivating and encouraging better performance. Although it can seem challenging, teachers play a significant role in creating an environment to develop attitudes and awareness about science that encourages learning, improves students' behavior and creates better science achievement at every level of education.

Keywords: Classroom Management, Skills, Science Achievement, Academic Achievement.

I. INTRODUCTION

Classroom management is a key mark of the total education process. It contains all the steps through which interaction between the 'educator' and the 'educant' take place. Classroom management is the development of ensuring that classroom lessons run smoothly in spite of disruptive behavior by students. The term also refers to the prevention of disruptive behavior of students. Classroom management refers to all those essential activities which are highly necessary not only to create but also to maintain a supportive and orderly atmosphere. It includes planning and preparation of teaching and learning materials, organization of the materials, decoration of the classroom, creation of expectation and establishment and enforcement of rules and routines in the classroom.

For all this, classroom is the formal place, where the teacher has to make the students comfortable. It starts with the seating plan, participation with teacher, posing questions, seeking guidance from the teacher. Furthermore the classroom ethics talking, walking, sharing, pitch of voice, tolerance of teacher and fellow colleagues become the obligation on part of the students.

Academic achievement is the attainment of educational goals by the students and plays a vital role in obtaining ideal harmonious development. Academic achievement and its correlates is a popular field of research. Many studies were conducted on academic achievement of the students in relation to psycho-social and cognitive factors such as intelligence, cognitive styles, self-concept, emotional maturity, adjustment, home environment, school environment, classroom managerial skills, attitudes towards teaching profession etc. Managing the classroom is the art and skill of organizing all the teacher activities so that effective learning may take place without the least wastage of time and energy. In the light of present scenario, the social and familial situation of child is changing and has effects on the achievement of students. Science education plays an important role in development of the country thus this study was conducted to observe the impact of different factors on science achievement of students in Indian context.

Singh, Singh and Giri (2016) found relationship between scientific attitude and academic achievement of rural area's intermediate college girls educating in science stream. Academic achievement was positively correlated significantly with scientific attitude. It means that with increase in science achievement, scientific attitude of students also increases. Manu (2016) studied classroom managerial skills and its impact on teaching effectiveness of secondary school teachers and results confirmed that there was a significant relationship between Teaching Effectiveness and Classroom Managerial skills of secondary school teachers. Sheidaie and Avarsin (2015) found middle-school teachers' effectiveness of Tabriz considering their classroom management style and results show that interactive style was more effective than intervention style and also found that classroom management style of teachers was different considering their gender.

II.   NEED OF THE STUDY

In Indian secondary schools, the most common problem reported by teachers is those that relate to behavior management in the classroom. The evidence is irrefutable, surveys of graduates education schools and colleges indicate that sometimes in an attempt to maintain order in the classroom sometimes teachers can actually make the problem worse which leads to known implications such as; lackadaisical attitude towards learning, loss of interest in the subject and in general a poor academic performance of such a child. Over the years there has a record of poor performance of students in science examination in the country. It has also been observed that students no longer have interest in learning science. Since classroom management is a keystone for students learning and has been cited by virtually every researcher who looked at the relationship between educational practices and student results. Hence, the present study explored the relationship between effectiveness of classroom management skills of teachers and its relationship with Science Achievement.

III.   STATEMENT OF THE PROBLEM

The topic identified for the current investigation is on "Effectiveness of Classroom Management skills on Science Achievement at Secondary Level"

IV.   PURPOSE

The purpose of this research is to know the effectiveness of classroom management skills on Science Achievement at secondary level.

V.   OBJECTIVES OF THE STUDY

1.   To establish the relationship between Classroom Management Skills of teachers and Science Achievement of secondary school students.

2.   To find out the effect of sex on Science Achievement of secondary school students.

VI.   RESEARCH HYPOTHESES

The following hypotheses formulated for the present investigation:

1.   There is no significant relationship between Science Achievement of secondary school students and Classroom Management Skills used by the teachers.

2.   There is no significant difference in the Science Achievement of secondary school boys and girls.

VII.   METHODOLOGY

The purpose of this research is to know the effectiveness of classroom management skills on Science Achievement at secondary level. The present research was followed by descriptive survey method. Giving representation of management type (government, private aided and private unaided), a sample of 210 students were randomly selected from secondary schools in Malur Taluk, Kolar District. Science Achievement was collected from the office records of their respective schools. Teaching Rating Scale developed by Dr. R.C Deva was used by the researcher to know the classroom managerial skills. The collected data was analyzed through correlation and independent 't' test and in all cases the level of significance was fixed at 0.05 level of confidence.

VIII.   DATA ANALYSIS AND INTERPRETATION

Table–1: Shows number, degree of freedom, 'r' value and significance between Achievement in Science and Classroom Management Skills.

Variables	N	Df (N-2)	'r' value	Sig.
Science Achievement and Classroom Management Skills	210	208	0.806*	0.000

*Significant at 0.05 level.

The table-1 shows the correlation between Achievement in Science and Classroom Management Skills of secondary school students. The obtained 'r' value 0.806, which shows a positive significant relationship at 0.05 level ('r' critical value 0.138) between Achievement in Science and Classroom Management Skills scores of secondary school students. Hence, the stated null hypothesis was **rejected** and alternative hypothesis has been formulated that "there was a positive significant relationship between Science Achievement of secondary school students and their teacher's classroom management skills." It concludes that students learned with better classroom management skills used by their teachers had higher science achievement and vice versa.

TABLE-2: SHOWS THE NUMBER, MEAN SCORES, STANDARD DEVIATION, 'T' VALUE AND LEVEL OF SIGNIFICANCE OF SCIENCE ACHIEVEMENT SCORES OF SECONDARY SCHOOL BOYS AND GIRLS.

Variable	Groups	No.	Mean Scores	Standard Deviation	't' value	Sig. level

Sex	Boys	105	143.571	53.882	1.87	NS
	Girls	105	157.200	51.948		

[NS]Not Significant

The above table-2 shows the number, mean scores, standard deviation, 't' value and significance of Science Achievement between secondary school boys and girls. The mean scores of secondary school boys and girls are 143.571 and 157.200 and their standard deviations are 53.882 and 51.948 respectively. The table further shows that the obtained 't' value 1.87 which is less than the table value of 1.97 (df=208) at 0.05 level and thus it is not significant at 0.05 level. Hence, the stated null hypothesis is accepted that is "there is no significant difference in the Science Achievement of secondary school boys and girls." It was concluded that sex factor of students was not influenced to improve their science achievement.

The comparison mean scores of Achievement in Science between boys and girls are graphically presented in Fig.1.

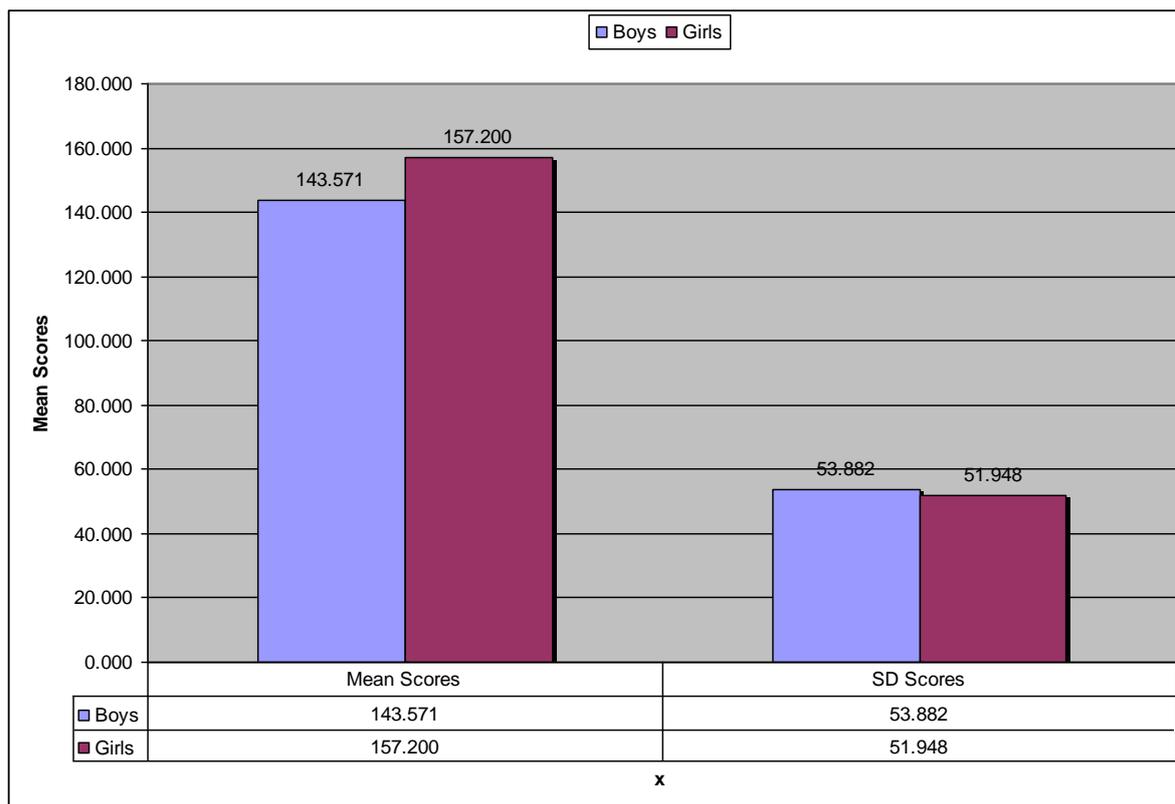|	Mean Scores	SD Scores
Boys	143.571	53.882
Girls	157.200	51.948

Fig.1: Bar graph shows comparison mean scores of Achievement in Science between secondary school boys and girls.

IX.   FINDINGS

1. There was a positive significant relationship between Science Achievement of students and their teacher's classroom management skills. ('r'=0.806; P<0.05).

2. There was no significant difference in the Science Achievement of secondary school boys and girls. ('t'=1.87; P>0.05).

X.   CONCLUSION AND EDUCATIONAL IMPLICATIONS

From the correlation result it was proved that there was a positive significant relationship between Science Achievement of students and science teacher's effective classroom management skills and 't' test also confirmed that no significant difference in the Science Achievement of secondary school boys and girls. The study implies that by implementing a classroom management rewards system, teachers better control problem student behavior. Classroom management rewards system might not work for every situation, it is an effective tool to help motivate students to work on achievement and better actions during class. Differentiating the assignments is a simple way to gain student attention and keep it focused on the classroom. By taking measures to support students, offering different teaching strategies and focus on rigorous educational standards, teachers should keep the class by motivating and encouraging better performance. Although it can seem challenging, teachers play a significant role in creating an environment to develop attitudes and awareness about science that encourages learning, improves students' behavior and creates better science achievement at every level of education.

XI.   REFERENCES

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