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A STUDY ABOUT THE RELATION BETWEEN STUDENTS ACADEMIC ACHIEVEMENTS AND THEIR SEATING POSITION IN CLASSROOM

Dr. Tapas Ghoshal
Asst.Teacher, Sagarbhanga High School.

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ABSTRACT:
        The present study was an attempt to find out the relation between students academic achievements and their seating position in classroom. Thirty students of class-X were selected as sample of the study. The study was experimental in nature therefore, "The pre-test-post-test Equivalent Groups Design" was used for the collection of data. Sample students were divided into two groups i.e. control group and experimental through a pre-test and each group was composed of 15 students. Students of the experimental group were seated on the first three benches of the classroom for next one month. After statistical analysis of the data, the researchers concluded that there is a positive relation in between the students' academic achievements and their seating position in classroom among the students of secondary schools.

KEYWORDS*: academic achievements, seating position, experimental study, t-test.*

INTRODUCTION: -
        Teaching is a profession that requires specialized skill and knowledge to impact significantly on students learning. One factor associated with improved achievement among learners is the position at which they sit in a classroom. For example several studies such as Levine et.al[1] (1980), Marx et.al[2] (2006), Siang[3] (1991), Tagliacollo et. al[4] (2010) have proved that those students who sit in the front tend to be more active and have higher achievement scores.
        While an extensive body of research exists regarding the delivery of course knowledge and material, much less attention has been paid to the performance effect of seating location within a classroom. Seating assignments can position a student closer to the instructor, making it easier to see and hear the teacher. Seating proximity to the instructor can encourage attentive behavior, classroom engagement, and discussion participation. Seating type may also influence the learning environment by providing more comfort, better visibility, or improved movement[5]. In this paper, the researcher examines the effects of seating position on increases in student academic achievement at the classroom level. The research question to be answered in this study is- "is there any relation between students' academic achievements and their seating position in classroom?"

LITERATURE REVIEW:
        Ngware et.al[6] conducted a study to understand the influence of classroom seating position on student learning gains in primary schools in Kenya. The result revealed that seating in the front row in a classroom led to higher learning gains of between 5% and 27% compared to seating in other rows. Thus, the classroom seating position has a positive and significant effect on learning achievement.

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Available literature shows that students who sit near the chalkboard have better school performance compared to those who sit far away from the chalkboard (Benedict et.al, 2004)[7].

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However, other studies have found no detrimental effects of sitting at the back on learning achievement (Kalinowski et.al, 2007)[8]. According to Taglioacollo et. al (2010)[4], achievement has led teachers to move students closer to the chalkboard with a view toward raising their grades, but that outcome may not always be realized. Taglioacollo et al (2010)[4] posit that motivation to learn is the mediating factor between seat position and student academic achievement, and hence there exists no direct effect of seat position on student academic performance.

The association between students' seating position in the classroom and their performance has been poorly studied. That is why the researcher is conducted a study to explore the relation between students academic achievements and their seating position in classroom.

OBJECTIVES OF THE STUDY:
The objectives of the study are:
➢ To find out the relation between students academic achievements and their seating position in classroom.
➢ To find out the effects of students seating position in classroom on their academic achievements.
➢ To suggest important recommendation for the students seating position in classroom.

HYPOTHESES OF THE STUDY:
The following three null hypotheses are developed for the achievement of above mentioned objectives:
H_01: There is no significant different between the performance of control and experimental groups on pre-test.
H_02: There is no significant difference between the performance of the control and experimental groups on post-test.
H_03: There is no significant difference between the performance of control and experimental groups on retention test.

Population:
All the secondary school students in Durgapur Sub-division, paschim Burdwan (West Bengal) constituted the population of the study.

Sample and Sampling:
Thirty students of class-X of the Sagarbhanga High School (Govt.Spon.) are selected as sample through simple random sampling design. Sample students are classified into two groups i.e. control group and experimental group through a pre-test. In each group, 15 students are included.

Tool Used for the Study:
The study is experimental type and therefore pre-test-post-test technique is used for the collection of data. To collect data from both groups i.e. control and experimental groups, two question paper are made from three stories and one poem of Bengali subject. One question paper is used among the participants of both groups before the treatment as pr-test and other is distributed among the students of both groups after treatment as post-test. These two question papers are used as a research tool.

Procedure:
The paper under research is specially designed to explore the relation between students' academic achievements and their seating position in classroom. The study is experimental in nature therefore, 'the pre-test-post-test equivalent groups design' is used for the collection of data. The

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researcher is taken thirty students of class ten as samples. These students are divided into two groups i.e. control group and experimental group by equating them on the basis of their previous knowledge in subject of Bengali as determined through a pre-test. According to the present study, for the next one month, a Bengali teacher taught two groups with equal importance. For this time period, as a treatment experimental group will be placed on the first three benches of the classroom and the remaining students will sit on the next bench.After one month, the researcher along with one other teacher administered a post-test immediately to investigate whether students of experimental group have learnt well as compared to the students of control group. After one week the researchers again administered the same post-test with slight changes in the sequences of the questions as a retention test to the students of both groups. In this way data is collected and compared.

Analysis of Data:
➢**Analysis of data pertaining to $H_0 1$**
[$H_0 1$: There is no significant different between the performance of control and experimental groups on pre-test.]

Table-1
Showing the "t" between control and experimental groups on the basis of their mean scores on pre-test.

GROUPS	N	M	SD	SED	t	Level of significance
CONTROL	15	25.33	1.66			
EXPERIMENTAL	15	24.66	1.94	0.65	1.01	NS

df=28 table value of t at 0.05=2.04

Interpretation: Above table reveals that the value of "t" between mean scores of control and experimental group is not significant at 0.05 levels. So the null hypothesis that "There is no significant different between the performance of control and experimental groups on pre-test" is accepted. The students of both groups are showed equal performance on pre-test.

➢**Analysis of data pertaining to $H_0 2$**
[$H_0 2$: There is no significant different between the performance of control and experimental groups on post-test.]

Table-2
Showing the "t" between control and experimental groups on the basis of their mean scores on post-test

GROUPS	N	M	SD	SED	t	Level of significance
CONTROL	15	46.66	1.75			
EXPERIMENTAL	15	61.33	1.62	0.61	23.82	0.01

df=28 table value of t at 0.01=2.76

Interpretation: Above table reveals that the value of "t" between mean scores of control and experimental group is significant at 0.01 levels. So the null hypothesis is rejected. It clearly indicates that the students of experimental group showed significantly excellent performance as compared to the students of control group on post-test.

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➢**Analysis of data pertaining to H_03**
[$H_0$2: There is no significant different between the performance of control and experimental groups on retention-test.]

Table-3
Showing the "t" between control and experimental groups on the basis of their mean scores on retention-test

GROUPS	N	M	SD	SED	t	Level of significance
CONTROL	15	46	1.74	0.60	27.37	0.01
EXPERIMENTAL	15	62.66	1.59			

df=28 table value of t at 0.01=2.76

Interpretation: Above table reveals that the value of "t" between mean scores of control and experimental group is significant at 0.01 levels. So the null hypothesis is rejected. It clearly indicates that the students of experimental group showed significantly excellent performance as compared to the students of control group on retention-test.

RESULTS AND DISCUSSION:
After statistical analysis of the data, the researcher arrived at the following major findings:
➢ There is no significant different between the performances of selected students of secondary school on pre-test. The students of both groups are showed equal performance on pre-test.
➢ After giving treatment, the students of experimental group showed significantly excellent performance as compared to the students of control group on post-test. So, there is a significant different between the performance of control and experimental groups on post-test.
➢ After one week from post test, the retention test also proved that the academic performance of control and experimental groups differ significantly.
➢ The results also indicate that there is a positive relation in between the students' academic achievements and their seating position in classroom among the students of secondary schools.
➢ It is also proved that the students who are sitting at the front row had done better results than the rest of the students in the classroom. So it is also clear that Communication among student teachers, attention of the learners etc are depend on students' seating positions in class room that affect the performance of the learners.
➢ It is also found that the activity, participation, performance of students of experimental group is better than the control group.

CONCLUSION:
        Present study indicates that there is a significant relationship between students' academic achievements and their seating position in classroom. The result of this study is indicating that the students who are sitting at the beginning in the classroom had done better results than the rest of the students. Thus, it is recommended that like English medium schools, the government and government sponsord schools should be implicated rotationally seating system in classroom. Teacher can change classroom seating position in a way that optimizes learning achievement for every learner, since the seating position has the potential to improve achievement gains.

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