Research Paper Education

A Study on the Effectiveness of 'Minute Paper' as A Classroom Assessment Technique in Social Science

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ABSTRACT

The aim of the present study is to find out the effectiveness of minute paper in the social science. Experimental method adopted in the present study and 160 secondary school students were selected from Villupuram educational district. Self made tools namely minute paper and achievement test in social science were used. Findings revealed that the minute paper has significant effect on achievement in social science and there is significance difference between the means of the control group and the experimental group in the post-test achievement in social science.

KEYWORDS minute paper, social science, experimental method, etc.

INTRODUCTION

Evaluation plays an enormous role in the teaching-learning process. In learning, it contributes to formulation of objectives, designing of learning experiences and assessment of learner performance. Besides this, it is very useful to bring improvement in teaching and curriculum. It provides accountability to the society, parents, and to the education system. Classroom assessment techniques are formative approach assessment techniques. These techniques are ungraded activities which are conducted by the teacher in the classroom setting. The important aim of these classroom assessment techniques is to give the feedback to the teacher, whether the students understand the content or not which was taught by teacher during the beginning of the class. Based on feedback given by the learner, teacher can made adjustments in the teaching. Effective teachers can use various methods to find out whether students are learning or not learning. But assessment techniques provide clear idea on students learning and remedial measures to improve students' learning.

NEED AND SIGNIFICANCE OF THE STUDY

Classroom assessments designed to affect learning by providing feedback to learners and instructors typically differ from summative assessments as they are administered during instruction and do not affect student grades. Black and William (1998) report that formative assessment has shown effects which range from 0.40 to 0.70 standard deviations on standardized tests. Classroom measures can provide continuous feedback for both teacher and students, and need not only be used when learning has come to an end (Guskey, 2003). In fact, teachers can utilize the information they collect from their assessment of student learning to make adjustments in instruction, and students can use feedback from frequent assessments to adjust their own learning strategies. Secondary schools, in particular, provide a promising environment for innovation and best practice recommendations specifically aimed at that level include the utilization of non-traditional or modern methods of classroom assessment and to utilize frequent assessment. Classroom assessment is a continual activity for teachers to enhance the quality of instruction and student learning (Brookhart, 1999). Past research has established a theory of the role of classroom assessment in student academic achievement (Alkharusi, 2011; Brookhart, 1995; Brookhart & DeVoge, 1999; Brookhart & Bronowicz, 2003; Rodriguez, 2004). Minute paper is one of the flexible and time inexpensive techniques and it has positive effect on students' achievement (Amruth kumar & Devika, 2008). National Forum was to establish criteria for quality schools, the Schools to watch criteria and both the theory and past research pointed to a conclusion that classroom assessment could contribute to student achievement. Hence, the researcher decided to study the effectiveness of minute paper as a classroom assessment technique in social science.

STATEMENT OF THE PROBLEM

The present study is stated as "A study on the effectiveness of 'minute paper' as a classroom assessment technique in social science".

OBJECTIVES OF THE STUDY

The following objectives have been formulated for the present study.

- To find out whether there is any significant effect of minute paper on achievement in social science.
- To find out whether there is any significance difference between the means of the control group and the experimental group in the pre-test achievement in social science.
- To find out whether there is any significance difference between the means of the control group and the experimental group in the post-test achievement in social science.

HYPOTHESES

- The following hypotheses have been formulated for the present study.
- The effect of minute paper on achievement in social science is low.
- There is no significance difference between the means of the control group and the experimental group in the pre-test achievement in social science.
- There is no significance difference between the means of the control group and the experimental group in the post-test achievement in social science.

SAMPLE OF THE PRESENT STUDY

Random sampling technique was used in the selection of and 160 secondary school students in villupuram educational district were selected as the sample for the study.

TOOLS USED IN THE PRESENT STUDY

The investigator has used the following tools

i. Minutes paper developed by the investigator.

ii Achievement test in social science developed by the investigator.

METHOD OF THE STUDY
Experimental method has been employed in the present study.

HYPOTHESES TESTING
HYPOTHESIS NO - 1
The effect of minute paper on achievement in social science is low.

TABLE 1
SIGNIFICANCE OF THE DIFFRENCES BETWEEN THE MEANS OF THE CONTROL GROUP AND THE EXPERIMENTAL GROUP IN THE ACHIEVEMENT IN GAIN SCORES OF SOCIAL SCIENCE

Group	Method	Mean	SD	Gain score	Level	Numbers & Percentage %
Experimental group	Mean +SD	12.8500 + 2.81542		15.66542 and above	High achiever	20 25%
	In between Mean +SD & Mean – SD			11 to 14	Average achiever	43 53.75%
	Mean -SD	12.8500 - 2.81542		10.03458 and below	Low achiever	17 21.25%
control group	Mean +SD	5.3125 + 2.12039		7.43289 and above	High achiever	27 33.75%
	In between Mean +SD & Mean – SD			4 to 6	Average achiever	36 45%
	Mean -SD	5.3125 - 2.12039		3.19211 and below	Low achiever	17 21.25%

From the above table, it is inferred that average achiever in the control groups' fall between the ranges 4 to 6, Whereas in the experimental group average achiever falls between the range of 11 to 14 .Therefore experimental group is found to statistically higher than control group in the average level of gain scores .It indicates minute paper is higher effective. Therefore null hypothesis is rejected and concluded that the effect of minute paper on achievement in social science is high.

HYPOTHESIS NO - 2
There is no significance difference between the means of the control group and the experimental group in the pre-test achievement in social science.

TABLE 2
SIGNIFICANCE OF THE DIFFRENCES BETWEEN THE MEANS OF THE CONTROL GROUP AND THE EXPERIMENTAL GROUP IN THE PRE-TEST ACHIEVEMENT IN SOCIAL SCIENCES

GROUPS	Count	Mean	SD	Calculated t-value	Remark at 5% level of significance
CONTROL GROUP	80	15.33	2.68	1.54	Not significant
EXPERIMENTAL GROUP	80	14.68	2.91		

It is inferred from the above table, the obtained 't' value 1.54 is lesser than the table value at 0.05 level of significance. Hence the null hypothesis is accepted and it is concluded that there is no significance difference between the means of the control group and the experimental group in the pre-test achievement in social science.

HYPOTHESIS NO - 3
There is no significance difference between the means of the control group and the experimental group in the post-test achievement in social science.

TABLE 3
SIGNIFICANCE OF THE DIFFRENCES BETWEEN THE MEANS OF THE CONTROL GROUP AND THE EXPERIMENTAL GROUP IN THE POST-TEST ACHIEVEMENT IN SOCIAL SCIENCES

GROUPS	Count	Mean	SD	Calculated t-value	Remark at 5% level of significance
CONTROL GROUP	80	20.64	3.46	12.87	Significant
EXPERIMENTAL GROUP	80	27.53	3.15		

It is inferred from the above table, the obtained 't' value 12.87 is greater than the table value at 0.05 level of significance. Hence the null hypothesis is rejected and it is concluded that there is significance difference between the means of the control group and the experimental group in the post-test achievement in social science.

Findings of the study
The effect of minute paper on achievement in social science is high.

There is no significance difference between the means of the control group and the experimental group in the pre-test achievement in social science.

There is significance difference between the means of the control group and the experimental group in the post-test achievement in social science.

Conclusion
The present study clearly indicates that the effectiveness was found in terms of post-test. The experimental group which was taught with the help of minute paper shows a clear advantage over the control group .Thus the minute paper promises to be more effective formative evaluation technique than the conventional method.

REFERENCES

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