



ORIGINAL RESEARCH PAPER

EDUCATION

DEVELOPING A CONCEPTUAL MODEL FOR TEACHING STUDENTS WITH MATHS ANXIETY AMONG UPPER PRIMARY LEVEL

KEY WORDS: Maths anxiety, Maths Performance, Conceptual Model

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ABSTRACT

In modern world, Mathematics is being increasingly used in sciences, technologies, social science, education etc. With the use of computer and other devices, there is a more emphasis on mathematics. Though the world is more mathematically inclined, the majority of students in school feel it boring and more abstract. In upper primary level, understanding the mathematics concept is a vital one to develop the students' future performance of maths in their higher education. Though the teacher can teach it with the help of modern educational technological devices and more advanced effective methods the poor performance of the students continues to remain in the mathematics. The present research has proved the effectiveness of conceptual models for controlling the maths anxiety among students at upper primary level. In order to control the maths anxiety at upper primary level in future if this model is used they will perform better in the mathematical concepts. In this aspect, the duty of teacher is to control the maths anxiety among students at upper primary level. There are lot of techniques for the controlling maths anxiety among students but only a few techniques are highly influencing for the controlling the maths anxiety. In this aspect the investigator has identified conceptual model animation based teaching to control the maths anxiety among students. It is concluded that this method is highly effective one rather than the other techniques for controlling the maths anxiety among students studying at upper primary level.

INTRODUCTION

Today's learners are under the pressurizing situation that they have to develop their mastery in various subjects and aspects. Since the expectations of the today's learners are also more, the teachers should try to fulfill all their expectations at all level. The teachers is also should take keen effort to instruct the learners. The responsibility of the teachers is also more to adopt new methods and techniques of teaching and to adapt to the innovations of the teaching-learning process in the classroom. Since there are different methods of instructions for the effective participation of the students; the constructivism is the field of educational philosophy and psychology that attempts to make the students to construct knowledge by their own. Out of the various techniques of constructivism, the "Conceptual model " is a very suitable technique that promotes and acculturates active participation in the construction of knowledge by the students.

NEED AND SIGNIFICANCE OF THE STUDY

At present the student community particularly in upper primary level is under very pressure and anxiety due to the technological advancement and socio economical factors of the society. The students who are studying at upper primary level meet a lot of challenges and complicated tasks in their educational settings. In mathematics performance there are lots of factors involving concepts in present curriculum. The maths anxiety is the major problem of students' community at upper primary level. The anxiety caused by different contributory factors may influence their academic performance in different subjects. In spite of students having good memory, intelligent quotient, comprehension ability the reasoning of the individual and their performance are low because of the anxiety. Hence, it is essential to find out a conceptual model for math anxiety students to improve their performance. Thus, an attempt is made through this study to reduce anxiety of students in mathematics by developing conceptual model which will help them to enhance their performance. Once the study proves that the conceptual model has an impact in reducing anxiety among students, and enhancing mathematical performance at school level, it can be generalized.

SAMPLE

The investigator has selected 40 students with maths anxiety were classified in two groups each group constituted 20 students with maths anxiety alone can be taken for the present investigation.

OBJECTIVES OF THE STUDY

1. To identify and assess the level of mathematical anxiety and

maths performance of students studying VIII standard .

2. To find out the effectiveness of developed conceptual model for reducing mathematical anxiety and enhancing mathematical performance of VIII standard students prior, and after stage of experiment.
3. To find out significant differences, if any, of mathematical performance of control group and experimental group pre test and post test among VIII standard students
4. To find out the relationship if any between mathematical performance of control group and experimental group of pre and post test among VIII standard students.

HYPOTHESES OF THE STUDY

1. The level of performance in mathematics both control group and experimental group in pre test and post test
2. There is no relationship between pre test and post test of control group and experimental with respect of performance in mathematics

Table :1 The level of performance in mathematics both control group and experimental group in pre test and post test

	Control Group (%)	Experimental Group (%)
Pre test	45.53 %	32.44%
Post test	57.46%	67.55%

The level of performance in mathematics in Post test of experimental group is higher than the Post test of control group

Table 2 The pre test mean achievement scores of the control and experimental groups

Test	Mean	S.D	Mean	't' value	Level of significance
Control group pretest	17.1	1.61	0.55	0.99	Not significant
Experimental group pretest	17.65	1.87			

It is concluded that there is no significant difference between the pre tests mean scores of the control group and experimental groups.

Table 3 The post test mean achievement scores of the control and experimental groups

Test	Mean	S.D	Mean	't'	Level of
C-group Post test	23.1	1.71	13.65	23.19	Significant
E-group Post test	36.75	1.99			

It is concluded that there is a significant difference between the post tests mean scores of the control group and the experimental group.

CONCLUSION

The present research has proved the effectiveness of conceptual models for controlling the maths anxiety among students at upper primary level. In order to control the maths anxiety at upper primary level in future if this model is used they will perform better in the mathematical concepts. In this aspect, the duty of teacher is to control the maths anxiety among students at upper primary level. There are lot of techniques for the controlling maths anxiety among students but only a few techniques are highly influencing for the controlling the maths anxiety. In this aspect the investigator has identified conceptual model animation based teaching to control the maths anxiety among students. But the conceptual based animated models are only in English. In this aspect, the investigator had decided to prepare conceptual model with animated teaching in Tamil for the better understanding of selected concepts of mathematics. It is concluded that this method is highly effective one rather than the other techniques for controlling the maths anxiety among students studying at upper primary level.

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