A STUDY OF LEARNING OUTCOME OF INNOVATIVE APPROACH IN TEACHING MATHEMATICS IN PRIMARY STUDENTS

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Abstract: The study was conducted to identify innovative approaches in teaching Mathematics in primary grades to achieve higher learning outcomes. The derivatives applied in the study range from the teacher manipulative to student motivation. The research objectives were to study the learning outcome of innovative approach in teaching mathematics in primary students and to observe the attitude of students towards learning.

The examined population was comprised of 33 students of primary grades from an International School in Thailand. The primary source of data is the student performance in the school prior to application of innovative approaches. The four different approaches, visual, hands on application, Media application and Project work were used to teach the students. The researcher wanted to observe the increase in the learning outcome. The research design was based on one group experimental design comprising of Pretest (O_1) and Posttest (O_2) results. The research instrument consist of, Continuous Comprehensive Evaluation and Periodical assessment to study the grades and Questionnaire to study the attitudes.

Findings in this research were reviewed by scope of deriving new teaching standards is evident, which can be pursued for future researches and developing strategies for teaching and conducting studies can thus be highly beneficial for learning outcomes. It was observed 42.4% students' performance greatly improved from B or C grade to A & A* grade. The students' response to the innovative approach was also highly encouraging as majority approved of them and it was observed, that students had improved Interest level and Participation after application of Innovative approaches.

Keywords: Innovative approach, Learning outcomes, primary students, Mathematics

Introduction

Mathematics is a remarkable invention of human thought, a purely logical construction independent of experience and yet the basis for our understanding of the laws of nature. Much of modern mathematics, beginning with the invention of calculus in the seventeenth century, was developed in a close interplay with discoveries in physics and other natural sciences. It is now generally recognized that the need for largely unsuccessful, that many academicians were forced to comment that mathematics is the subject matter.

Mathematics is increasing, as mathematics provides the appropriate tool for modeling and understanding complex phenomena in nature, technology, and society. In particular, modern computer technology has increased the need for mathematics, as well as the range of scientific problems for which mathematics is relevant.

To harness this curiosity during elementary school ages and to incorporate an understanding in math is vital since those children who fail to understand the basics of math invariably struggle later in their school years. It is essential to involve children in an understanding of math. This is not an attempt to address issues relating to the variety of definitions of "innovation", and the value judgments inherent in the usage. The most common assumption is that innovation is a deliberate process (or product, directed towards outcome, but not necessarily achieving) improvement, which may involve originality or adaptation. We shall return to some of these considerations, including innovation as generated by individuals and by systems, as distinct from "change", and as a response to different situations.

The next step here is to consider what the education largely accepts as innovations, as planned changes that either seeks to replace conventional or traditional teaching and learning processes, or, which involve entirely new processes, which respond to contextual factors rather than to intrinsic factors within teaching and learning. The researcher had used the traditional methodology for class instruction with adequate practice and learning sessions. The topics--requiring reinforcement and re-teaching went fine but the fresher and newer topics.

If the presentation of a lesson is too easy to follow, most of the class will not need to learn the new material on their own. They will have a certain degree of confidence in their new knowledge, and this will tend to stifle their intellectual pursuits. Students construct mathematical structures that are complex, abstract, and powerful actively in a, learning environment. In such a setting, they explore

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