



THE APPLICATION OF ACTIVITY SET BASED ON TEACHING TECHNIQUE OF HIGH IMPACT PRACTICES AIMING AT DEVELOPING THE STUDENTS' PERFORMANCE IN LEARNING INTEGER SYSTEM OF THE 7TH GRADE STUDENTS

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INTRODUCTION

According to the observation on problems in teaching mathematics of the 7th Grade students, it was found that the problem was the lack of instructional media. The significant factors in developing the students' skills and proficiency, in growing their self-learning ability and in applying the knowledge in the real life were to provide more knowledge source and learning activities as well as to select the efficient instructional media and the appropriate teaching technique. Referring to the survey of teaching activity provided to the 7th Graders of Ban Don Han Community School on the 2016 academic year, it could be seen that the performance of students did not meet satisfactory level. In order to develop education to be efficient and effective, the activities should be various, students-centered and develop the skills in working as a team, in solving problems and in inquiring knowledge by themselves. This aimed to encourage and develop the higher performance of the students.

OBJECTIVES

The Objectives of this study were:

- 1.To compare the pre and post performances of the 6th Grade students.
- 2.To develop the set of activities for the 6th Grade students in learning the Integer System.
- 3.To compare the attitude of the 6th Grade students toward the study of mathematics.

EXPECTED OUTCOMES

- 1.The students were able to learn from the set of various activities based on the teaching technique of High Impact Practices. Those activities enabled the students to be interested and pay attention to the class and hence resulted them to have higher performance in learning mathematics.
- 2.The teacher completed a set of activity benefitting the development of the calculation skill in learning mathematics for the 7th Grade. This set enabled the students to have more understanding and profound knowledge in the subject and especially to take less time in studying.
- 3.The mathematics teachers used this set of activity as a guideline in setting up the same package to students in other levels.
- 4.The students had good attitude in learning mathematics.

METHODOLOGY

1.Target Group:

The target group was twelve students in the 7th Grade of Ban Don Han Community School in Wang Yai District under the Office of the Secondary Education Service Area 3 on the 2016 academic year.

2. The study tools include:

- a. A set of activity in learning the Integer System designed for the 7th Grade students
- b. An exercise comprising of 20 questions to evaluate the students' performance in learning the Integer System.
- c. A questionnaire of 20 questions for assessing the students' attitude toward the mathematic study

DATA ANALYTICS

The data analytics was to compare between the quantitative data collected, such as, the test score that was calculated average value & S.D. and the criterion.

References

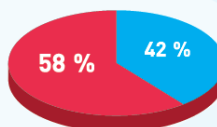
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STUDY OUTCOMES

The outcomes in conducting a set of activities and a teaching technique based on High Performance Practices in teaching mathematics about the Integer System for the 7th Grade students were as follows:

1) In order to assess the performance of the 7th Grade students in learning mathematics about the Integer System by using a set of activities and a teaching technique of High Performance Practices. The study shows that the students' posttest scores were higher than their pretest scores.

The comparative study of average score before and after running a set of activities on the Integer System



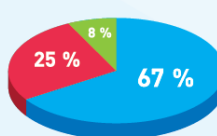
Average scores before study was 12.25 points.

Average scores after study was 17.08 points.

2) A set of activities in learning mathematics about the Integer System of the 7th Grade students based on the teaching technique of High Performance Practices was developed.

3) According to the survey, the satisfaction level of students in learning mathematics by using a set of activities and teaching technique of High Performance Practices was high.

The satisfaction survey of students toward the mathematics study by using a set of activities on the Integer System



Very satisfied

Satisfied

Neutral

Less satisfied

Dissatisfied

CONCLUSION AND DISCUSSION

The research conclusions were as follows

1) The students showed their higher performance in studying mathematics. This was proved by higher scores of their post-test than the pre-test.

2) The teacher developed a set of mathematics learning activities about the Integer System based on the teaching technique of High Impact Practice for the 7th Grade students.

3) The satisfaction level of the students in studying mathematics through a set of learning activities based on the teaching technique of High Impact Practice was very high. This result was relevant to the research of Tiwalai Yeenyong, Pornchai Thongchua, Joompol Khamweera . (2015, Abstract). This research stated that the set of learning activities was efficient in encouraging the students to develop their abilities in solving mathematics problems (82.67/79.82). According to the statistics, the targeted 9th Grade students significantly scaled up their skills in solving mathematics problems in the level of .05. Besides, they were satisfied with studying mathematics through the set of activities. Referring to the research of Tidarat Pinituwan (2012, Abstract), it was summarized that the set of activity based on the process of five steps in solving problem aiming at enhancing the skill in solving the mathematics problems in terms of the decimal calculation (plus, minus, multiply and divide) passed the efficiency threshold of 75/75. Also, the students voted the highest level of their satisfaction in this set of activities.

Recommendation

The teachers should set up a diverse set of activities in order to attract the students' attention. In particular, the teachers should group the students by mixing among the students with high performance, moderate performance and poor performance. This will enable them to support one another. The students with poor performance will be encouraged to improve whereas the ones with high performance will develop their skill in explaining or teaching their classmates.