



STUDENTS' UNDERSTANDING ON MULTIPLICATION CONCEPT
AT SMK SEKSYEN 7, SHAH ALAM

BY

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ABSTRACT

Many mathematics educators worldwide as well as in Malaysia are concerned whether the students demonstrate understanding of multiplication concept or just applying the concept on the questions. The purpose of this study was to investigate the level of understanding in multiplication concept among secondary school students and the common errors done by students in solving multiplication questions. This study used quantitative and qualitative approaches. 89 students of Form Four from SMK Seksyen 7, Shah Alam (51 male and 38 female) were involved in this study. A set of multiplication questions test and questionnaire were given to students from three different streams which are 33 Science, 25 Engineering and 31 Economy. This study was found that students' performance in multiplication concept was in good level because they have high level of understanding on multiplication concept. However, the distribution of the performance is not normal, rather skewed to the left which means the performance of students is very good because they obtained high marks. Besides, there are negative correlation between students' performance in multiplication concept and different streams. In addition, the result showed that there is a significant difference in students' performance in multiplication concept between gender and different streams. Besides that, data also showed there is a significant difference of students' performance in multiplication concept between streams for the intermediate and high level of difficulty of questions but not the low difficulty. In addition, from analysis of students' error, common errors had done by students in solving multiplication questions are operand error, place-value error, initial zero error, BODMAS operation error, careless error and comprehension error.

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CHAPTER 1

INTRODUCTION

1.0 INTRODUCTION

Nowadays, mathematics is one of the most important parts that are used in our daily life for instance in teaching, business, engineering, architecture and others. Therefore, each field will use a little bit of mathematical concept and knowledge. Then, many tasks across all fields of mathematics and across many subject areas which recall of basic multiplication concepts as a lower - order component of the overall task. To enable students to focus on more difficult tasks such as problem solving, proficiency in basic facts and skills is an advantage (Ashcraft, Kirk, & Hopko, 1998; Kilpatrick et al., 2001; Wu, 1999).