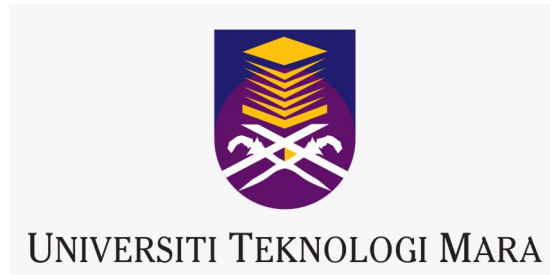


UNIVERSITI TEKNOLOGI MARA



**FACTORS AND TYPES OF ERROR
THAT CONTRIBUTES TO THE DIFFICULTIES IN SOLVING
MATHEMATICAL PROBLEMS
AMONG YEAR 5 PUPILS IN SK GOEBILT, KUCHING**

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Bachelor of Education (Primary Education)
with Honours

JANUARY 2016

ABSTRACT

The objectives of this research are to identify the factors and types of algorithm error that contributes to difficulties in solving mathematical word problems. Research respondents are 18 pupils from 2 different class of year 5 at SK Goebilt, Petra Jaya, Kuching, Sarawak. Samples are chosen using stratified sampling. This research used test that contains 10 questions. The test results and findings are analyzed using descriptive statistics. In this research, pupils were tested using a set of 10 question of mathematical word problem. After the test, pupils will be interviewed based on Newman Error Analysis Procedure that had been modified to analyze the problems and mistakes. The results show that factors that contribute to difficulties in solving mathematical word problems are reading, understanding, transforming word problem, applying process skill and encoding. Meanwhile, for the types of algorithm errors are careless, computation error, wrong writing, wrong place value and others. This factors and types of errors occur during the test especially in applying process skill in the questions and making more computation error when answering the questions. Teachers must play their role at school with creative and innovative lessons so that pupils will be able to develop their thinking skills while solving mathematical word problem questions.

ACKNOWLEDGEMENTS

I would like to express deepest gratitude to my supervisor Dr Hwa Tee Yong for his full support, expert guidance, understanding and encouragements throughout my study and research. Without his professional patience and timely wisdom, my research work would be a frustrating work.

I am also indebted to Mr Kamarol Bahrein B Hj Rom, our supervisor for EDU subject for Semester 7. Without the guidance and support this work would not have been completed.

I'm feeling grateful with my family, my wife, Normisha Bt Yahya, and my children, Hasif, Nur Hafiya and Hafidh for their support and motivation in order to completed this research.

Finally, I would like to thank my school administration team, my working colleague and my fellow friends in Universti Teknologi Mara, Kota Samarahan for their unconditional support and encouragements during the last four years. Special thanks go to these numerous friends who helped me throughout this research.

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CHAPTER 1

INTRODUCTION

1.0 Introduction

Problem solving is one of the main components in Standard Primary School Curriculum or Kurikulum Standard Sekolah Rendah (KSSR). According to Mokhtar, Aminah and Lim (2001), pupils in primary school still disable to master the problem solving questions although they are able in doing operation with procedure. Moreover, mathematics had been used in many fields in this world. Hence, the problem solving skills have to be mastered by our pupils in school. The purpose of this research is to find the factors and types of error that contribute to the difficulties in solve mathematical word problems among Year 5 pupils in Sk Goebilt.Jalan Bako, Kuching Sarawak. The causes will then be analyzed based on Newman Error Analysis (1973, 1983) who identified the sequence of steps used to classify errors. The types of error is analysed based on pupils working steps (algorithm) in answering the test.

As we all know, mathematics is one of the knowledge which always discover the changing when the new elements brought in order to satisfy the pupils' needs and challenges in the future. Primary School Integrated Curriculum (KBSR) was the previous syllabus in Malaysian education system. The latest now is Standard Primary School Curriculum (KSSR). All these kind of syllabus have to plan and conducted carefully in order to create the meaningful experiences besides challenge the ability of pupils. In KSSR, Higher Order Thinking Skills (HoTS) had been introduced among