

UNIVERSITI TEKNOLOGI MARA

**MATHEMATICAL WORDS PROBLEM: AN
EXPLORATORY STUDY ON THE
DIFFICULTIES FACED BY THE PUPILS IN
SEKOLAH KEBANGSAAN ABANG AING, SRI
AMAN. SARAWAK.**

SHARIFAH JAMA'AIAH BINTI HAJI WAN ZAIN

Dissertation submitted
for the degree of
Bachelor of Education (Primary Education)
with Honours

Faculty of Education

SEPTEMBER 2014

ABSTRACT

In Malaysia, like many other countries, problem solving is one of major aspect in mathematics curriculum which required students to apply and to integrate many mathematical concepts and skills as well as making decision. However, students were reported to have difficulties in mathematics words problem solving. The focus of this study is to explore the difficulties the difficulties facing by the pupils and the techniques the teachers use to overcome it in Sekolah Kebangsaan Abang Aing, Sri Aman, Sarawak. The major mathematics skills and cognitive abilities in learning that caused the difficulties especially in mathematical words problems-solving among students from students' and teachers' point of view. The study was carried by using 30 pupils from a primary school in SK Abang Aing and focused on four samples of pupils and two teachers that were selected through purposeful sampling. A qualitative approach is used in order to have clearer understanding. Apart from the observation done, face to face interviews were carried out. Interviews were recorded and transcribed. Data finding was analyzed descriptively. Data findings showed that respondents lacked in many mathematics skills such reading and understanding the language used within a word problem, recognising and imagining the context in which a word problem is set, forming a number sentence to represent the mathematics involved in the word problem, carrying out the mathematical calculation and interpreting the answer in the context of the question. Information skill was the most critical. The deficiency of these mathematics skills and also of cognitive abilities in learning inhibits the mathematics words problem-solving. This understanding on how the deficits influenced the mathematic words problem-solving is expected to give effective guide lines in preparing diagnostic instruments and learning modules in order to develop the mathematics skills.

ACKNOWLEDGEMENT

The composing process of this dissertation is the most precious journey I have ever had. Without this journey, I would not have realized how much treasure, fortune, and love Allah had endowed me. He gave me a remarkable supervisor that really opened my eyes and warmed my heart academically and personally. Miss Adeline Engkamat, a tutor at UiTM (Sarawak Learning Centre), devoted her time, effort, and support to teach me how to be a serious scholar and thought-provoking writer by being one herself. I am also obliged her, who attended to every minute detail in his proofreading of this dissertation and gave me valuable corrections and suggestions.

I am particularly indebted her as she painstakingly went over the original draft page by page and line by line making numerous valuable suggestions and feedback that had a significant impact on the final form of this dissertation. Not forgetting the headmaster of SK Abang Aing, Sri Aman, Mr Wan Ismail bin Wan Chula and Mathematics teachers, Mdm Rohana bt Bustami, Mr Tahir bin Sebawi, Mr Yunus bin Pawi and Mr Abang Rosni bin Abang Moslini for their help and support by using the students in exploring the difficulties faced by the students in mathematical words problem at the school.

Last but not least, I want to thank my family for their understanding and untiring love. My husband, Mr. Wan Sulaiman bin Haji Wan Hasbi, my children, who have been my cheerleaders through the long and sometimes difficult academic path I have followed. Not forgetting my parents who always support and pray for my success in study. Many other people contributed valuable help and support. It is impossible to cite them all. Though their names do not appear in this acknowledgement, they shall always be cherished and remembered in my heart.

TABLE OF CONTENT

	PAGE
ABSTRACT	i
ABSTRAK	ii
ACKNOWLEDGEMENTS	iii
DECLARATION	iv
LIST OF TABLES	vii
LIST OF FIGURES	viii
1.0 INTRODUCTION	1
2.0 RESEARCH OBJECTIVE(S)/RESEARCH QUESTIONS/ HYPOTHESIS	6
3.0 LITEARTURE REVIEW	7
4.0 LIMITATIONS OF RESEARCH (before conducting the research)	19
5.0 METHODOLOGY	20
5.1 Research Design	20
5.2 Sample Size (& School)	20
5.3 Instrument/Measurement	21
5.4 Intervention/treatment /data collection	23
5.5 Data Analysis	24
6.0 FINDINGS AND DISCUSSION	26
6.1 Findings	26
6.2 Discussion	45

1.0 INTRODUCTION

In learning mathematic, most of the students have difficulties in mathematical word problem. They are unable to write the appropriate mathematical expression from the word problem. According to Lim (1982, in Beng Lim Tin, 2006), he stated that many students encountered problem in words problem compare to problems involving symbols and numbers. Therefore, personalizing or associating the words problem with the students' knowledge background in context may help the students to overcome this problem.

Mahmud (2001, in Zainal Abidin Bin Afri, Aleni Binti Zainuddin & Suardi, 2008), also agreed that, personalizing an help motivate the students to solve the words problem even though if they do not go through the correct process of doing it. Therefore, it is a need for us to identify the pupils' problems in understanding the mathematical words in solving the mathematic questions. By then, we would know what the strategies are or approaches on how to help the pupils' in overcoming their weaknesses.

This section discussed the background of the study, problem statement and significance of study of the research.

1.1 Background of the study

Consistent and compatible with the goals of the National Education Philosophy, Mathematics is the only subject that seeks to build the minds of students to think critically and creatively (Ministry of Education, 2001). Therefore, queries