# UNIVERSITI TEKNOLOGI MARA



# THE EFFECTIVENESS OF USING LATTICE METHOD TO OVERCOME THE MULTIPLICATION PROBLEMS IN MATHEMATICS SUBJECT AMONG YEAR 4 PUPILS IN SEKOLAH KEBANGSAAN MATU BARU, KUCHING, SARAWAK.

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CONTENTS		PAGE
ABSTRACT		iv
ABSTRAK		v
ACKNOWLEDGEMENTS		vi
DECLARATION		vii
LIST OF FIGURES		viii
CHAPTER 1	INTRODUCTION	
	1.0 Introduction	1
	1.1 Background of the Study	3
	1.2 _ Statement of Problem	5
	1.3 Objectives of the Study	6
	1.4 Research Questions	7
	1.5 Significance of the Study	8
	1.6 Limitation of the Study	8
	1.7 Definition of Terms	9
CHAPTER 2	LITERATURE REVIEW	
	2.0 Introduction	19
	2.1 Literature Review	20
	2.2 Conclusion	22
CHAPTER 3	METHODOLOGY	
	3.0 Introduction	23
	3.1 Research Methodology	23
	3.2 Population and Sampling	24
	3.3 Data Connection and Instrument	25
	3.4 Conclusion	27
CHAPTER 4	RESULTS AND DISCUSSION	

#### ABSTRACT

Objectives of the research are to identify the factors that influence pupils interest in learning Mathematics in primary schools especially primary four pupils, Besides, this research also identify whether pupils' achievement are influenced by their interests in Mathematics. Research respondents are 30 pupils chosen randomly from 4 different classes in one of the rural schools in Kuching that is SK Matu Baru. This researcher uses questionnaire which are given to pupils to answers and work out using the "Lattice Method" The results shows an increase in interest in the learning of mathematics show a positive impact to the pupils as a whole. As a conclusion, the using of the "lattice Method" shows the importance for teachers to move forward towards the 21<sup>st</sup> century learning which is more on pupils centered learning.

#### **CHAPTER 1**

### INTRODUCTION

#### 1.0 Introduction

In our Malaysia education system, since the introduction of KLSR and so forward, learning of mathematics in primary schools has been a subject taught and learns by millions of Malaysians since our independence day. Nowadays, this subject is one of the important subjects in our educational system. There are four basic skills in Mathematic to be mastered by the pupils. There are addition, subtraction, multiplication and division. To be successful in Mathematics, all the basic skills must be mastered first, especially multiplication. Different methods are taught so that pupils understand multiplication better and can be used in their daily activities but the long process of teaching this multiplication make pupils harder to master them and most teachers still uses the old method of memorization which can't be implemented or not suitable in our time that is going towards 21<sup>st</sup> century learning. Because of this, pupils tend to make mistakes especially the simplest calculation that is when multiplying two digit number by two digit number.

In the process of developing the pupils, the schools become the main medium to disseminate all knowledge and skills to the pupils. Within the school system, the teachers are the people who execute the policies from the ministry of education and carrying out the curriculum set by ministry by means of teaching and learning. The teachers are the medium;

1

#### 2.1 Literature Review

Based on the topic action research entitle the effectiveness of using the "Lattice Method" to overcome the multiplication problem and achievement in mathematics among Year 4 pupils in Sekolah Kebangsaan Matu Baru, Petra Jaya, Kuching, the researcher hoping that the literature review from the various references will contribute to the clear frame of the task.

Rational number concepts are among the most important concepts children will experience during their pre-secondary school years. There is cause to be concerned about children's apparent lack of ability in this area. The National Assessment of Educational Progress (NAEP) conducted in 1972-73 and again in 1977-1978, suggests that children seem to be learning many mathematical skills at the level of rote memorization and do not understand underlying concepts.

There is something odd about the way in which mathematics has been taught in the past. Too often, there has been little or no provision for pupils to play an active or generative role in the learning mathematics. Fortunately, the way we teach mathematics is beginning to change. In the past, high school math programs focused on the rote work, memorization, and mastery of hand methods of solving problems. Only the advanced mathematics pupils could work on interesting mathematics.

Looking at the above citation, we have to agree that within the Malaysian context, the Education Ministry is concerned with cases whereby young Malaysian pupils fail to grasp numbers concepts in the initial stage of learning Mathematics. Instead of understanding the concepts naturally, certain pupils still depend on rote memorization which pupils tend to forget when they no longer practice the concepts. Learning in Mathematics has been too teachers'