UNIVERSITI TEKNOLOGI MARA

THE EFFECTIVENESS OF USING POWERPOINT AND MULTI-PURPOSE MULTIPLICATION TABLE IN ADDITION FRACTION WITH DIFFERENT DENOMINATORS : A CASE STUDY AMONG YEAR 5 PUPILS IN SK SIOL KANAN, SARAWAK

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ABSTRACT

This particular research is undertaken to identify the level of understanding amongst Primary 5 pupils in regards to adding fraction with different denominators with the usage of PowerPoint and multi-purpose multiplication tables. Additionally, this has provided me the chance to become a better teacher through exploring the best ways to improve my teaching skills. With reference to adding fraction with different denominators, it is done through the approach of manipulating teaching aids whereby it is seen through usage of PowerPoint and multi-purpose multiplication tables. Data were collected through three main methods which are the pre-test, post-test, and questionnaire were analysed using a quantitative method in the form of percentage and marks. The research has found out that the use of powerpoint and multi-purpose multiplication tables has been proven to be able to help respondents to master the topic of adding fractions with different denominators. Moreover, as a teacher and researcher myself, it has provided me with a chance to improve myself in my respective fields and as a person. As such, all of the respondents enjoyed and were actively involved in all of the activities that were done in conjunction with the aims and objectives of the study.

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CHAPTER 1

INTRODUCTION

1.0 Introduction

Mathematics is a discipline that trains the mind to think in a logical and systematic way when solving problems and make decisions. Learning math is challenging because it is about learning critical and analytical thinking. Generally, math curriculum is aim at providing mathematical education in a fun way to develop logical thought to be applied in everyday life. Before students can use more complex mathematical skills in everyday life, they must master the basic concepts related to math first. In orther word, the basic concepts must be mastered by the pupil prior to mastering the more complex concepts. However very often, student thinking about some basic concepts are incorrect. Misundertanding and misconception of basic concepts are two obstacles that hinder them from mastering more complex concepts. Cultural background may also lead to students developing misconceptions on basic mathematics concepts.

Misconception is one of the main obstacles for further learning. Studies show that it is very difficult to correct students' misconception. Thus, foe effective teaching and learning, the formation of concepts in the minds of students must be carefully planned by the teachers. This involves the selection of correct teaching methods and the correct sequencing of concepts and examples.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

In line with the objective of the study to determine the effectiveness of using Powerpoint and multi-purpose time tables in teaching addition of fractions with different denominators, this chapter is divided into three sections. The first section is literature review related to fraction. This is followed by the second section which touches on the advantages of using Powerpoint in enhancing teaching and learning of mathematics. The third section is the review on the use of multi-purpose multiplication tables to assist pupils in mastering multiplication operations that involve fractions.

2.1 Literature review on Fraction

Fraction has been in the calculation for decades. The concept of fractions, like many abstract mathematical concepts, is not always easy to understand. According to Lulia and Teodoru Gugoiu (2006), the concept of equivalent fractions is an essential part of understanding fractions. To enable students to understand, a full range of techniques should be used starting with simple graphical representations for lower grade pupils to a more complex representation like factor tree method for advance pupils. The operations on fractions must also be presented presented gradually beginning with simple addition, subtraction, multiplication, and division before progressing to more complex or combination of two or more operations.