UNIVERSITI TEKNOLOGI MARA



UTILISING FRACTION PIECES TO IMPROVE YEAR 5 PUPIL'S ABILITY IN CONCEPTUAL UNDERSTANDING AND FINDING EQUIVALENT FRACTION WITH DENOMINATOR UP TO 10 PROPER FRACTION

ENSOH ANAK UBA

Dissertation submitted

For the degree of

Bachelor of Education (Primary Education)

With Honours

Faculty of Education

January 2015

ABSTRACT

There are time when the strategies used in teaching and learning process rendered ineffective to certain pupils. At such, Lucy, Connielia and Wilson my pupils in Year 5, was not able to cope up with the lessons, I gave even after various strategies. This situation motivates me to conduct an action research in my effort to help them. To achieve this, I used an innovation of fraction charts called Fraction Pieces which utilises the use of touchable and movable pieces. Specifically in this action research, I aimed to improve of them ability in expressing understanding conceptual and finding an equivalent fraction with denominator up to 10 of a proper fraction. In order to measure the improvement, I make use of pre-test and post-tests, interviews and observation to collect data. The result shows that they have 100% of increase in conceptual understanding an equivalent fraction with denominator up to 10 of a proper fraction. They also had shown an increase of 100% except Wilson was only 60% increase finding and writing an equivalent fraction with denominator up to 10 of a proper fraction. The result of increase in them score shows the effectiveness of Fraction Pieces. Therefore, I believe that this strategy can also be applied to other school which pupils are having problem with equivalent fraction.

ACKNOWLEDGEMENT

Thank you God for the health, strength, and mind to seek for knowledge and truth, for the people who hold me falling apart.

Thank you University Teknologi Mara Kampus Kota Samarahan Sarawak, for the opportunity to learn, for the experiences gain and for love cultivated for teaching

Appreciation and thanks are also dedicated to my supervisors for EDU 650 Action Research, Dr. Hwa Tee Yong, for his guidance and counsel so that I can prepare my actions this study.

Thank you my family and friends, especially my classmate for the help and motivation. You guys are pillar of my strength, and the ones who help me going.

TABLE OF CONTENTS

CONTENTS

PAGE

1

3

5

| ABSTRACT | ii |
|--------------------|------|
| ABSTRAK | iii |
| ACKNOWLEDGEMENT | iv |
| DECLARATION | v |
| TABLE OF CONTENTS | vi |
| LIST OF TABLE | viii |
| LIST OF FIGURES | Х |
| LIST OF APPENDICES | xi |
| | |

CHARTER 1 INTRODUCTION

Background Of Study Problem Statement Research Focus

- 1.3 Objectives61.4 Research Question61.5 Significance of the Study6
- 1.6Limitation of the Study71.7Operational Definition71.7.1 Equivalent Fractions7
 - 1.7.2 Fraction Pieces 8

CHARTER 2 LITERATURE REVIEW

| 2.0 | Introduction | 9 |
|-----|--|---|
| 2.1 | Conceptual Understanding of Equivalent | |
| | Fractions | 9 |

CHAPTER 1

INTRODUCTION

1.0 Background of the Study

The very first hint of the problem show up during the researcher lessons of equivalent fractions. The first problem that the researcher observed on these lesson were that Year 5 pupils were unable to find an equivalent fraction as show in Figure 1.1

"From the look of it, the researcher was a bit confidence that most of my pupils could not grasp the concept of equivalent fraction. However, some of them show significant understanding when using fractions strips and fractions chart"

Fuival

Figure 1.1: Sample of pupil's exercise.

A presentation made by Singapore 's National Institute of Education joined by Cedar Primary School, Singapore in year 2007 entitled *The Learning and Learning Equivalent Fractions for Conceptual Understanding* stated that there are four methods that constitute the conceptual understanding of equivalent fractions. The first method is to interpret and articulate concept of fractions. The second method is in problem explain understanding using pictorial representations or personal anecdotes. The third one is to generate and explain the short-cut method of equivalent fractions followed by the fourth one, which is to apply the knowledge in problem solving. The problems