Universiti Teknologi MARA

Educational Game for Solving Mathematics Word Problems for Children

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ABSTRACT

Nowadays, children are not interested with the mathematics and they think mathematics is bored. They have difficulties when the question is written in paragraph or sentences. But if the same question is write in arithmetic equation, they normally can solve the question. Playing computer games is one of the most popular activities among children. Therefore, the idea of edutainment is very significant in attracting children to learn mathematics while playing. Game based learning is one of the modern pedagogical approaches beginning to gain attention in education. This project integrated with Multimedia Education application to make the learning process more attractive and fun for the children. The purpose of this application is to provide a better way of learning and make it easy for children to learn and understand by developing a prototype of an educational game in learning Mathematics word problems. The objective of this project is to develop a prototype for solving Mathematics word problems for children. The application will cover on the multiplication for year four syllabus.

Keyword: Mathematics Word Problems, Game Approach for Learning, Learning through Playing

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CHAPTER 1

INTRODUCTION

1.0   Introduction

This chapter provides the overview of the research and discussion of research background, problem statement, scope, significance and contribution of research of Educational Game for Solving Mathematics Word Problems for Children.

1.1   Research background

Nowadays, many children do not like mathematics and they find it boring (Kamran & Andishe, 2000). According to Wetzel (2008), children have difficulties solving mathematics word problems. However to develop a basic understanding of mathematics, they need to learn how to solve even the most difficult mathematics problem. These difficult mathematics problems are typically, word problems. Teaching children how to solve word problems in mathematics is critical if they are to develop full understanding of mathematics.

Children can typically solve a mathematics problem presented in numbers and equations. However when the same mathematics problem is written in a paragraph or sentence format, many children have difficulty sorting the important information from the distracting information. And it is a fact that they can solve the mathematics problem in most cases, but simply they do not know how to plan or strategies to solve the problem (Wetzel, 2008).

Therefore, this study is meant to develop an interactive game application for the children to help them in learning mathematics. This application includes the