

**Universiti Teknologi MARA**

**Traveling in Space of Desktop Virtual  
Reality Motivates Children to Acquire  
Basic English Vocabularies**

**Farah Hannah Azman**

**Thesis submitted in fulfillment of the requirements for  
Bachelor of Computer Science (Hons.) Multimedia  
Computing  
Faculty of Computer and Mathematical Sciences**

**JANUARY 2018**

## **ACKNOWLEDGEMENT**

Praises and thanks to Allah because of His Almighty and His utmost blessings, I was able to finish this research within the time duration given. My special thanks go to my supervisor, Dr Nazrul Azha Hj Mohamed Shaari for all the confidence, support and encouragement to make this a reality. To my beloved parents: for the patience and the drive in my pursuit for an academic achievement; thank you for everything.

## **ABSTRACT**

Vocabulary is of great importance to English language acquisition and it is a fundamental way in learning and using a language. However, learning a foreign language requires motivations which is a massive challenge faced by the students. Students tend to feel demotivated during traditional methods of learning vocabulary performed in classrooms. This project titled as “Traveling in Space of Desktop Virtual Reality Motivates Children to Acquire Basic English Vocabularies” is an attempt to identify the best technique of teaching for students to feel motivated in learning vocabularies. The main drive of this study is the attempt to motivate learners in a virtual simulation and exclusively enhance students’ vocabulary repertoire, specifically among kindergarten learners. In order to enhance the student’s motivation in learning, this project adopts the practice of desktop virtual reality, allowing the user to travel and interact in the virtual space. ADDIE model is implemented in the development of this project which covers the process of analysis, design, development, implementation and evaluation. The sample size for this study is 20, aged between 6 to 9 years old. This project then evaluates the satisfaction of the user and the effectiveness of the project using pre-evaluation and post-evaluation. The study concluded that the practice of desktop virtual reality elevate the student’s motivation while learning vocabulary.

# TABLE OF CONTENTS

<b>CONTENT</b>	<b>PAGE</b>
<b>SUPERVISOR APPROVAL</b>	ii
<b>STUDENT DECLARATION</b>	iii
<b>ACKNOWLEDGEMENT</b>	iv
<b>ABSTRACT</b>	v
<b>TABLE OF CONTENTS</b>	vi
<b>LIST OF FIGURES</b>	x
<b>LIST OF TABLES</b>	xiii
<b>LIST OF ABBREVIATIONS</b>	xiv
<b>CHAPTER ONE: INTRODUCTION</b>	
1.1 Background of Study	1
1.2 Problem Statement	2
1.3 Aim	3
1.4 Objectives	3
1.5 Scope	3
1.6 Significance	3
1.7 Limitation	4
<b>CHAPTER TWO: LITERATURE REVIEW</b>	
2.0 Introduction	5
2.1 Virtual Reality Technology	5
2.1.2 Types of Virtual Reality	9
2.1.3 Interaction Task	10
2.1.4 Issues in Virtual Reality	11

# CHAPTER 1

## INTRODUCTION

### 1.1 Background of Study

Imagine how helpful it will be if the human population in the world have sufficient vocabulary repository, then there will be less problem in the communication process, both verbally and non-verbally. Hence, this marks the significance of Vocabulary in language. Vocabulary is of great importance to English language acquisition since one cannot grasp what the companion trying to deliver neither conveying his/her own ideas without sufficient vocabulary repository. One of few researches, Heidari and Araghi (2015) cited Wilkins, “without grammar very little can be conveyed, without vocabulary nothing can be conveyed”. Vocabulary learning is a fundamental way in learning and using a language. It is in fact, one of the most difficult steps in learning a language especially when the learners have to learn, understand and try to use it actively (Heidari & Araghi, 2015). This is why the material and the way of delivering the material are critical.

There are numerous vocabulary learning tools available worldwide and can easily be retrieved from the World Wide Web – be it in the form of books, audio, video and video games. These learning aids are the most important in delivering the vocabulary context especially to early learners of vocabulary. To make the traditional way of learning environment in class less boring, the teacher himself/herself has to be creative in teaching vocabulary.

Consequently, learning style can be described as one of the factors that alleviate the learning process. Each child has their own diverse way of learning; some are