UNIVERSITY TEKNOLOGI MARA

GAME –BASED SCIENCE LEARNING FOR FORM 3 STUDENTS: "MINERAL IN EARTH'S CRUST"

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ABSTRACT

This study is to show if Game-based Science Learning for Form 3 students can help them in the Science subject as they find the subject is difficult and the current method of learning activity is not enough to attract them to learn it. The technique in learning activity should be diversified due to the modern technology, and fully utilized in order to help the teaching and learning activity become fun and in a potentially excellent manner. This has been done by doing some testing on ten participants to know the possible outcome. Upon the testing events, it becomes clear that game attract most participants. The testing that has been conducted involved two types of testing which is the pre-testing by using the traditional method and the post-testing is by using the developed Role Play Game (RPG) based game. The reading and knowledge skill are required to be successful in the game. RPG game is a two-dimensional game where it is a simple and easy yet it attracts the participant to play it more than they answering and reading some notes given in the pre-testing. This study finds that game helps in education, and help students to learn something in a new environment.

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CHAPTER 1

INTRODUCTION

This chapter provides the background and rationale for the study. It also accounts for the significant issues and problems that were encountered during the course of this research.

1.1   Background of Study

Malaysia's education system divided into four phases, and one of them is secondary phase (Kementerian Pendidikan Malaysia, 2017). In this phase divided into two levels. The first level is lower secondary and the second level is upper secondary; Form 1 to Form 3, and, Form 4 and 5 accordingly (Kementerian Pendidikan Malaysia, 2017).

In order to get into upper secondary, lower secondary students are required to complete their Pentaksiran Tingkatan 3 (PT3) when they are in form 3 (Lembaga Peperiksaan Malaysia, 2015). One of the subjects in PT3 is Science (Lembaga Peperiksaan Malaysia, 2015). According to Yasmin Ahmad Kamal & Lee (2015), they found that Science is one of the most difficult subjects in PT3 after interviewing few students.

Malaysia's Prime Minister Datuk Seri Najib Tun Razak giving his opinion by saying that in order to attract