

CHAPTER I

INTRODUCTION

1.1 Background of the Problems

Teaching English can be a challenge sometime for teachers. Akram et al (2013) explained that there are a number of factors for this issues, namely, low hours of English language teaching, students 'lack of interest and motivation for learning English, students' lack of concentration in the class, imbalance between students' capability and finally teachers' lack of proficiency and practice. Among those factors, students' lack of interest in the subject, or in this case English itself became the biggest factor that hinder the progress of teaching English.

In the traditional style of teaching English, teachers depend a lot on books, which is the mainstream media for students to learn. Apart from books, students constantly needs to find source material either through article, clipping or books. These material can often be found in a form of small texts condensed into a small format with minimal images. These materials can often be a source of boredom as it is particularly tedious to read them page by page every day. However in modern era, along with the development of computers, things might turn for the better as it is extremely convenient to do things thought it, including studying. Challenges and material suited for a specific level of difficulty will allow learners to absorb in the materials (Csikszentmihalyi, 1990). That means if the materials and the challenges do not met eye to eye, the learners cannot fully absorbed into the material.

As described by Csikszentmihalyi, materials or to be specific, an appropriate materials are crucial. Gunawan (2016) wrote an article in Jakarta post

which stated that Indonesian is the second worst among 61 measurable countries. Second worst is not exactly a good number. This number showed that the literacy level needs to be increased, yet as stated above, the conventional reading materials sometimes is not the best in solving literacy issues. In addition, the advancement of technologies gave birth to more and more products which is more appealing to use. In relation with conventional reading or learning materials, the same or the equivalent match will be found in modern platform. Take a book for example, a conventional book will be a hassle to bring if multiple books are needed at once. However, the modern platform equivalent can solve this problem, for example a smart phone. Using a smartphone, multiple books can be transformed into multiple epub files which is easy to bring and easy to read anywhere anytime. Moreover, smartphones contain so much more applications that reading, calculating, planning and many more learning activities can be done in one platform only. This shows that modern platform can be a place to bring the word innovation to life. Modern platforms allow multiple learning media to exist. Not only for consumers, developers also able to do so much more using modern platform. In relation to learning, using modern platform to develop a new learning material is possible. Therefore for some learners who have a little to no interest in books or other conventional materials, this will be very useful, especially if the material were to be developed in computer based platform such as PC or personal computer, Smartphone and other modern gadgets.

The way of living has become better and better because of computers. The accuracy, work length and reliability has become more accurate. Computer itself has been recognized in different name, smartphone, Tablet PC, or desktop to name

a few. Computers help us many ways: communication, transportation, training, entertainment and much more. Computer games are increasingly popular and are also the main entertainment amongst family members while computers have entered millions of families in most countries.

While conventional materials are often considered boring, games are standing at the opposite side of the shore. Prensky (2001) stated that there are twelve characteristics that make a game engaging. Those characteristics are: Games have rules, games have goals, games are interactive, games are adaptive, games have results and feedback, games have winning states, games have challenges, games have problems with solving problems, games have interaction and games have a representation and a story. Games have problems and are fun and fun to play and play.

Fun games give a sense of enjoyment and pleasure to the players. Players who enjoy the game will keep playing either to eliminate boredom or just for the sake of fun.

Games include a sense of intensity and passionate involvement. During the runtime, players will feel the challenge which absorbs the players into the gameplay. Therefore players will be directly involved to play and continue to be so.

All forms of games have structure. A structure makes a game comprehensible and playable. A player will be able to follow the structure of the game and achieve goals inside it. Different genres usually contain different structures. For example, an action game will revolve around player versus artificial intelligence or player which involves a series of physical actions like punching or kicking, in the other hand

adventure games involve a series of exploring and finding treasures. However depends on the developer, a game can be developed into a combination of different genres.

Goals are a common thing in games. Some of them are made into a form of achievements. Players will be able to attain these achievements and attain rewards through it. This system is very engaging as the layers will be eager to attain achievements.

Interactive games are designed to involve the player to engage the game during the runtime. This means games invite player to do something or according to a games' term, to do a quest. Finishing quest will give rewards to the players. An interactive will keep the players engage.

Most games are designed to have multiple environment in their assets. This made games playable in different conditions. For example, item A is needed to be taken to finish a quest, however a combination of item B and C can also be taken to finish the same quest. A rich environment made games gave the player a sense of flow.

Quests will gave results. It is either rewards or achievement or both. Rewards and achievements are a form of learning. Through rewards, player will learn to finish the quest in a correct and precise manner according to the parameter given by the game developers.

When player win a game, the player will fell a sense of accomplishments. The more the player accomplish something inside the game, the more rewards will be obtained. This will create a cycle where by the player finished a quest to win and uses the reward to finish another quest.

A challenge will make a game challenging. Sometime the game developer constantly releases events to give player more challenges. These events important because players needs to eliminate their boredom by doing more challenging events.

In a quest, it is extremely normal to have challenges. Often, these challenges are in a form of puzzles. Players are engaged to solve the puzzles to finish the quest.

Games also have interaction that gives players social groups. Meanwhile representation and story gives players emotion.

Irwansyah et al (2018) conducted a research on Augmented Reality or AR as the way to learn chemistry. The result showed that the concept of total molecular geometry based on increased reality has been qualified to be very viable to use as a learning source at a rate of 70.83-92.5%. This result implies the potential of AR-based learning media on androids, particularly in molecular geometry, in the learning of chemical. In addition to conventional source material, the main significance of this study is that a technology-based media can be a source for learners to learn.

Computer and video games are increasingly popular, as is widely reported in many media. In 2002, the ' gaming and reference devices ' world market hit US\$ 16.9 billion, with 3.3 million consoles sold in the UK alone. In terms of research and development potential and, in this case, research and development potential of education materials, such a large number may be considered to be a gold mine on its own.

Since games are increasingly complex in graphics, complexity, interaction and narrative, a range of genres are increasingly dominating the market. However,

there is no standard categorisation of such games; there is no taxonomy appropriate to your own audience, and different players in the play industries, for instance games outlets, developers, academicians, web review sites. The system employed in Herz (1997) closely resembles that many in the modern gaming industry are discussing these categorisations. This system includes action games, adventure games, puzzle games, role play games, simulation games, sport games and strategy games. The heart system is based on a number of different aspects.

The first in the list is action games. Action game is a broad term. All games that include a physical action like punching, kicking or even slashing can be considered as an action games. Action games along with the advancement of game consoles evolved into various form like Duel games and Role Playing Games. Duel games are a traditional form of action game in which the players are required to choose a virtual character to battle either another player or the system character. A well-known game like Takken is an example of this genre.

Unlike action games, players solve a set of logical puzzles (without time limitations) in most adventure games in order to advance through a virtual world defined. Although adventure games include puzzles, this genre is not limited to that. Puzzles are a form of additional content to enrich the main virtual world. Most adventure games contain a specific virtual world or a map in which the player's character explores. The virtual world can be in a form of a single map containing one area, a combination of area that form a massive hive of world or commonly known as open world map, or even a single map which connected into different individual maps or commonly known as dungeon. The player's character inside the

virtual world is free to explore the maps in order to finish a quests or tasks in a multitude of forms. Tomb Raider is an example of an adventure game.

Although elements of Puzzle games are included in Adventure games, there is a specific genre for puzzle solving games and it is called puzzle games. Puzzle games are a special genre for solving puzzle type games. The game entitled Tetris is one of the example of the puzzle game.

There is also a simulation genre. Simulation games are the game in which the player has to succeed within some simplified recreation of a place or situation for example a mayor of a city, controlling financial outlay and building works.

Similar to Simulation Games, players are also offered the ability to simulate more specific areas like sport and strategy in Sport Games and Strategy Games. Sport games are games carried a real life sport into a virtual world. There are a lot of sub-genre in sport games, for example racing, football, tennis and many other form of sport. Meanwhile Strategy games are games in which the player assumes a role such as commanding armies within recreations of historical battles and wars.

However the genre of the game does not limit itself into a simple action or puzzle solving, a massive combination of genre came with the name of role playing game. Role Playing Game or RPG is a massive genre in of itself, literally any form of genre and sub-genre can be inserted into an RPG. The frame of RPG allows a multitude of genre to be included inside the game. To give the reader a perspective of how massive this genre is, Grand Theft Auto or GTA can be a source of reference. The game literally include sport like racing, action, adventure, puzzle

and other genre. This is possible because the world in which the word of virtual game was made is basically an open world. Different from other type of open world, in RPG there is no single main quest or a single path. The player of RPG can choose to do any quests or tasks to their liking so there is no restriction as to what to do or which path to follow. The only limitation in RPGs is the timeline. For example a modern RPG like GTA cannot follow a fantasy setting, in the other hand, a fantasy RPG like Skyrim cannot follow a modern setting.

Apart from the above genre, there is a type of visual novel called a game. Usually it consists of images containing text, sounds, music and even voice to make the game dramatic. It is a story-driven game with a gameplay which is extremely minimal, by simply clicking to keep the game moving. Such games have been generally developed in Japan and are more popular. The usual visual novel uses several storylines to reach various endings. The player can select and modify the story by deciding points. However, the decision points of the game, their respective selection options and events are still handled by the authors of the game.

Using a computer based game to further enhance the experience of studying can be a solution to eliminate the boredom while studying. Visual novel can be the source of this further enhancement. Visual novels, as stated above are a genre of video games that typically have little game play elements and a greater focus on the storyline. Therefore it is a good genre to use when looking at the combination playability and source material for studies. The focus on the storyline and less game elements makes it easier to design and easier for learners to follow the material that is being presented like texts or events questions.

However, as beautiful as it may, Games are still to a large extent a source of entertainment. Therefore the education values in games are minimal. The same can be said to Visual Novel. Visual Novel, although it is a story driven genre, suffer the same issues with other genre which is the lack of education elements

Therefore as the researcher, it is expected to find a perfect balance in the realm of technologies and genres to create and appropriate material as a potential learning material. The researcher aim to develop an appropriate, error free computer based learning material in a form of a Visual Novel Game.

1.2 Problems Identifications

From the background that has been given, the researcher identified the problems as followed:

- a. Studying often invoked boredom.
- b. Reading conventional texts in conventional source of study is often becoming the source of boredom.
- c. There is a need to combine entertainment and education.

1.3 Research Questions

- a. How to develop a supplementary material for teaching English at high school using Ren'Py Game Engine?
- b. How is the performance of the Visual Novel developed using Ren'Py Game Engine?

1.4 Purpose of the Study

Based on the problem stated above, the purpose of the study are:

- a. To develop a supplementary material for teaching English at high school using Ren'Py Game Engine?
- b. To measure the performance of the Visual Novel developed using Ren'Py Game Engine?

1.5 The Significance of the Study

Developing a Computer Based Game to accompany the conventional study materials like a books is important. It is the first step to embrace the 21st century way of life which is more and more technology oriented. While books are very important, they also often become the source or boredom because the structure or format of the book itself. A dense text and with little to none pictures to represents the elements like Character or settings can be a little bit too much some times for students. Therefore a 'fun' process is needed and in doing so, combining technology and conventional study materials can be the first step to further elevate the process of studying.

1.6 Limitations of the Study

1. The game developed is designated for high school level as a supplementary material.
2. The game will be limited as a reading material for high school.
3. The game will be limited to the test stage and will not be introduced to the students.

1.7 Definition of Key Terms

a. Visual Novel

A Visual Novel is a genre of a computer game, it generally refers to a simple story driven game which contains dialogs, monologs, character, setting of time and place in a form of a two dimensional games (Pratama et al, 2017). The first ever science fiction type of Visual Novel was released in 1986 by Square Enix for the NES console (Square Enix, 2012).

b. Ren'Py

Ren'Py is a game engine based on Python programming language (“Why Ren'Py,” 2006). It is a piece of software especially designed as a tool to develop a Visual Novel. According to its official website at renpy.org, this software is a free and open source which means it is free to use and also free to be modified as the creator or game developer saw fit.