

Using English Minecraft module to enhance university students' motivation in learning English

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Abstract. This study aimed to investigate the use of English Minecraft module in enhancing Malaysian university students' motivation towards their English learning. To achieve this aim, the researchers employed a 25-item questionnaire which was given to 50 university students who were studying English at Universiti Malaysia Kelantan, Malaysia. Different statistical procedures such as means, frequency and t-test were used in analyzing the collected data. The finding suggested that the students agreed that the Minecraft module plays a big role on enhancing their motivation towards learning English. The students also pointed out that the use of Minecraft was not only fun but also improve their skills in terms of problem solving, creative and critical thinking as well as working in a group. In the light of these findings, the researchers suggested the use of games module such as Minecraft in teaching language learners as it is not only able to promote students' motivation to learn the language but also sharpen students' soft skills that will be significant for their learning in particular, and life at large.

Keywords: Minecraft, games-based learning, motivation, e-learning, English learning, university students

1 Introduction

In the current time, game has become an important part of the 21st century learners and its integration into the educational context warrants attention. The use of games does not only include activities which have objectives and rules but also fun. A few researchers recommend that language games ought to be put at the focal point of the second language teaching program rather being acknowledged as a fringe of the program, since, other than being fun, students also will incorporate objectives and controlled by rules. Thus, games are worthwhile since students don't feel any tension and their positive emotions increment and their self-assurance improve in light of the fact that they are not terrified of being rebuffed or reprimanded while they are utilising the language freely (Crookal, 1990). This suggests that the use of digital games is an effective language teaching and learning tool. These findings thus far has led the current researchers to use one of the most popular games currently which is called Minecraft in the teaching and learning of an English subject at Universiti Malaysia Kelantan, Malaysia.

2 Literature review

2.1 Minecraft and language learning

Minecraft is a digital game that was created by Markus Persson, a Swedish programme designer, in 2009. Minecraft is an open world, exploration and building game which allows the users to create and build their worlds by constructing, moving and altering cube-shaped spaces using digital tools. Minecraft can also be played with multiple players which promotes collaborative work experience. Given the game has potential to be used as one of the digital tools in teaching, various modifications have been done. One of it is the creation of a Minecraft education version known as, MinecraftEDU, that allows the game to be integrated into teaching and learning.

The research on Minecraft and language learning is very limited and the search for it only revealed the review on the use of Minecraft to teach a foreign language by Hausrath (2012) and challenges of using Minecraft in language learning by Uusi-mäkelä (2015). Hausrath (2012, p.5) argues that the teaching a foreign language through Minecraft requires students' communicative ability. Students need to communicate in doing their tasks in the game such as planning or collaborating in constructing their worlds and this suggests that Minecraft promotes authentic use of language in an authentic situation.

Another interesting study on Minecraft was conducted by Uusi-mäkelä (2015) where he measured the acquisition of the English language while playing Minecraft in a Finnish upper secondary school. He found that the students were excited to write in English while using Minecraft. Thus, the use of Minecraft provides an opportunity for the students to practice describing their activities in completing their tasks in the game. In contrast to Hausrath's (2012) finding, Uusi-mäkelä (2015) discovered that the students always switched their communication language in the game to Finnish when they were playing outside of the lessons. He pointed that there is a need for intervention to create an authentic communication environment for using target language.

Additionally, collaboration and problem solving are important behaviors associated with playing digital game (Danby et al., 2018), which have been highlighted as important skills for the 21st century. As mentioned previously, Minecraft offers collaborative work among its players and encourages creativity and critical thinking. Therefore, students can acquire these skills when they learn English through Minecraft. Thus, the present research will identify whether these skills emerged in their English learning through English Minecraft module.

2.1 Minecraft and motivation

Motivation in learning is often mentioned as one of the main advantages of using games in education (Gros, 2007; Pivec, 2007). Motivation plays a significant role in learning and accordingly its effect is regularly highlighted in different fields of education. The utilization of digital games is fundamental to advancing students' motivation in learning. With regards to Minecraft and motivation in language learning, the search for background literature is limited. Only one study was found which was conducted by Marcon (2017), who found that Minecraft prompted his respondents' motivation to learn as evidenced in their activities of discussing their character's actions during the game and planning how they will build their world in the virtual

landscapes. This finding suggested that the use of Minecraft increases students' motivation to engage in meaning making through gaming in their English classes.

In studying motivation and minecraft, the ARCS model of motivation is suitable to be looked at as it encompasses the components of attention, relevance, confidence, and satisfaction (Keller, 1987), that is relevant to the use of games in learning. According to Keller (1987), the model is developed based on four different components: the first is obtaining and sustaining learners' attention, the second is the relevance of the material with learners' past experience or academic requirements, the third is the learners' confidence to accomplish the learning goals and the fourth focuses on learners' satisfactory feeling in relation to their effort. Keller (1987) asserts that if the first three components are met, learners' overall satisfaction will be improved accordingly. Keller (1987) has designed the Instructional Materials Motivation Survey (IMMS) to assess whether the instructional material is consistent with the above-mentioned components and examine students' motivation.

In relation to study using ARCS model, Kaneko *et al.* (2018) reported a comparison of experiential learning using game-based educational material and non-experiential learning using e-learning-based educational material. They discovered a significant difference in attention, relevance, and satisfaction. Their results indicate that the scores of the game-based material in attention, relevance and satisfaction were significantly higher than those of e-learning. However, they found no significant difference between the game and e-learning in confidence scores.

Thus, the current study aims to answer the following research questions:

- 1) Does the use of English Minecraft module enhance university students' motivation in learning English?
- 2) Is there any significant difference between genders in their motivation to learn English?

3 Methodology

A survey research was conducted for this study. The participants of the present study were 50 university students, who were learning English 1 at Universiti Malaysia Kelantan (UMK).

In order to evaluate the students motivation with regards to Minecraft, an English Minecraft module was created and used in these students' lesson in English 1 classes for 8 weeks. The students were first briefed about the English Minecraft module and they then were split into smaller groups of four or five students. The researchers were also the instructors of the classes involved in this study, therefore, the researchers facilitated the group activities. The English Minecraft Module used is an English language problem based learning via Minecraft. It has 5 stages which consists of 8 lesson plans integrating Microsoft tools. The students will start from exploring issue, finding solution, designing Minecraft to experience sharing. After the students completed the module, they were given the questionnaire relating to their motivation in learning English using the module.

The data was collected by administering a modified instructional Materials Motivation Survey (IMSS) questionnaire (Keller, 1987) to the participants of the study. The original IMMS consists of 36 questions and four subscales. The modified version only consists of 20 questions. A new subscale was included in the questionnaire as it is to identify the skills that the students will acquire after using the digital game in their learning. The students were required to rate all items on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Some

expressions and words were changed in the IMMS questionnaires to accommodate the gamification setting. Thus, the questionnaire was divided into two segments; Segment A relating to demographic background while Segment B was the modified IMSS and the new subscale that was added with respect to the skills the students will acquire after they use the English Minecraft module.

The questionnaires were disseminated personally by the researchers after the students completed the module after 8 weeks. The completion of the questionnaire took around 15-20 minutes. The data acquired from the questionnaire was then coded for statistical analysis to answer the research questions..

4 Findings and Discussion

4.1 Demographic

There were 60% female and 40% male out of 50 UMK students answered the survey. All of the students are from the Faculty of Business and Entrepreneurship, UMK. Pertaining to their mother tongue, 90% of the respondents claimed that they used Malay language as their first language.

4.2 RQ 1: Does the use of English Minecraft module enhance university students' motivation in learning English?

In this section, students' motivation was analysed based on five subscales, namely attention, relevance, confidence, satisfaction and other skills. See Table 1 for the tabulated information.

Table 1. Students' motivation based on five subscales

Subscales	Mean Score
Attention	
Q1. The design of the game is eye-catching	3.94
Q2. There was something interesting at the beginning of the game that got my attention.	3.70
Q3. The quality of writing in the game helped to hold my attention.	3.66
Q4. The game has things that stimulated my curiosity.	3.76
Relevance	
Q5. I could relate the content of the game to things I have seen, done, or thought about in my own life.	3.38
Q6. The content in the game will be useful to me.	3.74
Q7. The content of the game is relevant to my interests.	3.94
Q8. Completing activities in the game successfully was 3.96 important to me.	3.80
Confidence	
Q9. As I worked on the game, I was confident that I could learn the content.	3.64
Q10. After knowing the introductory information, I felt confident that I knew what I was supposed to learn from the game.	3.58
Q11. When I first looked at the game, I had the impression 2.98 that it would be easy for me.	2.98
Q12. The activities in the game were not difficult.	2.52

Satisfaction	
Q13. Completing the exercises in the game gave me a satisfying feeling of accomplishment.	4.16
Q14 I enjoyed the game so much that I would like to know more about this topic.	3.68
Q15. I really enjoyed learning with the game.	3.78
Q16. It felt good to successfully complete the game.	4.02
Other skills	
Q17. This game has encouraged me to think creatively in creating the game.	4.02
Q18. I really enjoy working together with other people while playing the game	3.96
Q19. learn to think critically while playing the game	3.72
Q20. Playing the game has taught me problem-solving skill	4.08

As can be seen in the table above, the total mean score for attention subscale was 3.76 and the highest score was item 7 ($M = 3.94$) and the lowest score was item 3 ($M = 3.66$). These results suggest that students mostly thought that the Minecraft design was eye-catching and therefore attract their attention. However, the writing quality of the game did not help much in keeping their attention. As for the relevance subscale, the total mean score was 3.71. The highest score was item 7 ($M = 3.94$) and the lowest score was item 5 ($M = 3.38$). The results indicated that the English Minecraft module was relevant to their interest or needs. In the confidence subscale, the total mean score was 3.18. The highest score was item 9 ($M = 3.64$) and the lowest score was item 4 ($M = 2.52$). The results suggested that the students were confident in even that they will learn English while playing Minecraft though they might not be quite confident about the activities. In the satisfaction subscale, the total mean score was 3.91. The highest score was item 13 ($M = 4.16$) and the lowest score was item 14 ($M = 3.68$). The results showed that the students were overall satisfied with the game and their satisfaction level would be very high once they completed the game module successfully. As for the new subscale on the other skills that the students would acquire once they played the Minecraft, the total mean score was 3.94. The overall score for this scale was positive indicating that the Minecraft module has promoted skills such as problem-solving, working in a team, thinking creatively and critically.

4.3 RQ 2: Is there any significant difference between genders in their motivation to learn English?

According to the independent *t*-test result, there was no significant difference among male and female students' motivation.

5 Conclusion

Overall, results from the study showed the use of English Minecraft module promotes motivation among the students who used the module. It is suggested that creativity, self-determined learning and team work in solving the issues and real-world problem in the game would be helpful for them to learn the language. Therefore, the practical implication that can be drawn from this study is that language instructors can adopt a gamification technique in teaching their language courses. Despite the results, this study has some limitations. The generalisability of the results is subject to a small sample size. Hence, future studies with a larger scale of

investigations could be conducted. Further, it is reasonable to suggest that other variables such as students' learning styles and personalities should be investigated as they are also likely to have significant effects on students' motivation in a digital-game based learning setting. It is recommended that further research be undertaken in the form of interviewing the respondents in order to get in-depth insight from the students.

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