

Compet

International Teaching Aid

Reconnoitering Innovative Ideas in Postnormal Times

tio



2023

itac 2023 INTERNATIONAL TEACHING AID COMPETITION E-PROCEEDINGS

보니

Copyright © 2023 is held by the owner/authors(s). These papers are published in their original version without editing the content.

The views, opinions and technical recommendations expressed by the contributors are entirely their own and do not necessarily reflect the views of the editors, the Faculty or the University.

Copy Editors: Syazliyati Ibrahim, Azni Syafena Andin Salamat, Berlian Nur Morat (Dr.), Najah Mokhtar, Noor 'Izzati Ahmad Shafiai, Muhamad Khairul Anuar Bin Zulkepli (Dr.) Cover Design : Asrol Hasan Layout : Nurina Anis Mohd Zamri eISBN : 978-967-2948-51-3

Published by : Universiti Teknologi MARA Cawangan Kedah, 08400 Merbok, Kedah, Malaysia.

PREFACE

iTAC or International Teaching Aid Competition 2023 was a venue for academicians, researchers, industries, junior and young inventors to showcase their innovative ideas not only in the teaching and learning sphere but also in other numerous disciplines of study. This competition was organised by the Special Interest Group, Public Interest Centre of Excellence (SIG PICE) UiTM Kedah Branch, Malaysia. Its main aim was to promote the production of innovative ideas among academicians, students and also the public at large.

In accordance with the theme "Reconnoitering Innovative Ideas in Post-normal Times", the development of novel ideas from the perspectives of interdisciplinary innovations is more compelling today, especially in the post-covid 19 times. Post-pandemic initiatives are the most relevant in the current world to adapt to new ways of doing things and all these surely require networking and collaboration. Rising to the occasion, iTAC 2023 has managed to attract more than 267 participations for all categories. The staggering number of submissions has proven the relevance of this competition to the academic world and beyond in urging the culture of innovating ideas.

iTAC 2023 committee would like to thank all creative participants for showcasing their innovative ideas with us. As expected in any competition, there will be those who win and those who lose. Congratulations to all the award recipients (Diamond, Gold, Silver and Bronze) for their winning entries. Those who did not make the cut this year can always improve and join us again later.

It is hoped that iTAC 2023 has been a worthy platform for all participating innovators who have shown ingenious efforts in their products and ideas. This compilation of extended abstracts published as iTAC 2023 E-Proceedings contains insights into what current researchers, both experienced and novice, find important and relevant in the post-normal times.

Best regards,

iTAC 2023 Committee Special Interest Group, Public Interest Centre of Excellence (SIG PICE) UiTM Kedah Branch Malaysia



TABLE OF CONTENTS:iTAC 2023 e-Proceedings

NO.	TITLE	PAGE
1.	POETRY OUT LOUD: FOSTERING ESL LEARNERS PUBLIC	22
	SPEAKING SKILL Sharina Saad, Rafidah Amat, Razanawati Nordin, Asrol Hasan, Alia Nabella Fateha Zolkifli	
2.	KERTAS KERJA INFOGRAFIK IDA102 Siti Fairuz Sujak, Suzilla Jamari, Rohaya Sulaiman, Noraishah P. Othman	36
3.	AN INTERACTIVE WAY OF READING AND PLAYING VIDEO GAMES THROUGH 'READ AND PLAY' Izzatul Hasanah Mohd Rosli, Afifah Fadhlullah	43
4.	MOBILE ENERGY SAVER Md Nasser Bin Samsudin, Nur Azni Binti Mat Nawi, Noor Zanariah Binti Md Zain	49
5.	LET'S SPEAK Kimberley Lau Yih Long, Christine Jacqueline Runggol, Jacqueline Susan anak Rijeng, Michael Tiong Hock Bing	53
6.	ROLE PLAY: THE USAGE OF DOLLS IN IMPROVING THE SELF- CARE SKILLS AMONG AUTISM SPECTRUM DISORDER INDIVIDUALS WITH SEXUAL BEHAVIOUR PROBLEMS Mohd Yusof Zulkefli, Ireena Nasiha Ibnu, Shazleen Mohamed, Hamizah Sahharon	59
7.	''HAHAHA TECHNIQUE'': AN EASY WAY TO WRITE A PRESS RELEASE Abdul Hamid Saifuddin, Mohd Yusof Zulkefli, Wardatul Hayat Adnan	64
8.	MASTERING BUSINESS ANALYTICS AND FINANCIAL MODELLING: A MOOC COURSE BUILT ON GAGNE'S MODEL FOR OPTIMAL ONLINE LEARNING Mohd Shafiz Saharan, Dr. Hasroleffendy Hassan, Dr. Chaleeda Som Sak, Fauziah Mohamad Yunus, Roseamilda Mansor, Nabila Ahmad	68
9.	STUDENT'S PERCEPTION OF MOOC EXPERIENCE IN FLUID POWER TECHNOLOGY CLASS Norhanifah Binti Abdul Rahman, Mohamad Zamin Bin Mohamad Jusoh, Nur	73



AN INTERACTIVE WAY OF READING AND PLAYING VIDEO GAMES THROUGH 'READ AND PLAY'

Izzatul Hasanah Mohd Rosli Akademi Pengajian Bahasa, Universiti Teknologi MARA Melaka izzatulrosli320@gmail.com

Afifah Fadhlullah Akademi Pengajian Bahasa, Universiti Teknologi MARA Melaka <u>afifahfadhullah@uitm.edu.my</u>

ABSTRACT

Video games, in general, are electronic games that can be interacted with using input devices such as computers and gaming consoles. There are some people who perceive video games as having no educational value, as it is often presented negatively by the media. Thus, the fact that video games can be educational is always overlooked due to the public's negative perception, especially the older generation. "Read and Play" is a combination of an e-book and short video games targeted towards adolescents. A survey consisting of 21 respondents from different age groups between 11 to 24 years old was carried out to obtain their perceptions of reading short stories through video games. The finding reveals that gamification of reading in video games show positive feedback from adolescents and can encourage them to read more effectively. This study aims to help improve reading skills among adolescents through video games, to identify the factors that influence adolescents to read effectively through video games and to provide video games that are educational in content. In terms of novelty, this product is different in which it is an adaptation of 5 classic children short stories that are made into mini video games that caters to the targeted age group. The benefits of this product are immense as video games can provide "edutainment", which is both educational and entertaining, it can make reading fun and interactive by using gamification and to heighten interest in reading through reading and play. This product has the potential to be commercialized to adolescents being the target users and priced at RM5 since it is a small-scale video game with simple gaming mechanics. A digital gaming marketplace called "itch.io" is where this product is advertised and sold by most less experienced developers who publish their video games to reach local and global consumers.

Keywords: video games, edutainment, reading skills, gamification, adolescents

INTRODUCTION

According to Esposito (2005), a video game is defined as a form of playing using audio-visual apparatus. The term video game is often linked to entertainment by most people instead of education. This was evident when the dangers of playing video games for adolescents became a wide concern for parents. Excessive playing of video games may lead to addiction and an inability to differentiate between virtual and actual reality (Friedrichs et al., 2015). However,



several studies have also shown that video games can be an educational tool for adolescents if appropriately used. From the countless negative aspects that video games can cause to adolescents, it can be seen how much of an impact video games have. A research by Griffiths (2002) stated that video games have the potential to be educational when used in the proper context. Moreover, adolescents that spend more time playing video games that train peripheral demands are more inclined to have better reading skills compared to those that do not (Kleiboer, 2022). Participants with varying gaming experience levels completed a task requiring attention-demanding reading and concluded that exposure to peripheral demanding video games could improve one's ability to read quickly and efficiently. For this project, the researcher combined video games into an e-book. It consists of five short stories; readers must read a portion of each short story before continuing the stories through video games. The researcher decided to combine e-books and video games because this unconventional combination can easily attract people.

Problem Statement

Most adolescents can read, but not all of them can read effectively. This project, which focuses on reading while playing video games, is made to encourage reading among adolescents. Besides, it will help to improve student's learning experience in a multi-sensory, active and experimental environment.

Project Objectives

There are three objectives for this project. Firstly, to improve reading skills among adolescents through video games. To elaborate, adolescents nowadays spend more time playing video games than reading. Therefore, the researcher decided to use video games as a way for adolescents to improve their reading skills. Next, this project aims to determine what influences adolescents to read effectively through video games. Since the researcher wishes to use video games as a medium to improve reading skills, it is crucial to understand the factors that influence it. Lastly, to provide video games that are appropriate in an educational context.

Novelty

Novelty-wise, there are many educational games to improve reading skills, so this project itself is not something most people would consider new. However, this project can still be a novelty if utilized correctly. This is because an educational game that enables students to "play" and study conveniently and effectively may be more beneficial for them due to the fact they spend most of their time with their gadgets (Cheung & Ng, 2021). Therefore, integrating the element of edutainment and the fun factor are the best combination to attract 21st century learners not only to read but also to improve their language proficiency. For example, using this project in a primary school, where students are just beginning to learn to read and write effectively. This project can be a fun casual activity for them to improve their reading skills. The project as a whole may not cater to a broader demographic, but this could be a novelty for students in



school.

Benefits to Society

The researcher believes this project can be an exciting stimulus for adolescent students, especially those struggling with reading. It may not instantly change a student's reading skill, but with gradual exposure to reading through video games, students would find reading fun rather than boring. With time, they would be capable of reading effectively.

Commercialization Potential

As for the pricing, due to it not being available in physical form and its simple gaming mechanics, the product would be priced at RM5. Furthermore, the product is available on "itch.io." Additionally, if appropriately advertised, the project can reach those with educational backgrounds, such as educators and students. For instance, schools could use the project during a session with their students.

METHODOLOGY

The early stages of the project includes surveys from the public, mostly students and literature research on educational video games and components that influence effective reading. Next, for game development, a suitable software was used that allowed the author to develop a game by scratch but without the hassle of programming. When determining the genre of the video game, since the project focuses more on the reading aspect, the author decided on Role Playing Games (RPG) and Visual Novels (VN). According to Butler (2018), both genres have more reading elements than other genres. After developing the game, beta testing was conducted within a small circle of friends. The beta-testing includes proofreading sentences and identifying bugs or loopholes preventing players from proceeding smoothly in the game. Then, the researcher exported the game as an executable (.exe file), which made it downloadable to the public. Finally, the e-book was designed on Canva, and the games were published on itch.io.com.

RESULTS AND DISCUSSION

Firstly, to determine the perception of video games in general, a survey focused on the targeted audience, adolescents. The survey consisted of 21 respondents between the ages of 11 and 24 years old (Figure 1). These age range are the three stages of adolescence: early adolescence, middle adolescence, and late adolescence (Kids First Pediatric Partners, 2014).

Furthermore, the survey also asked whether video games can improve reading skills, to which majority of the respondents agreed (Figure 2). To further understand what makes reading in video games different, respondents were asked about the aspects of a video game that



influences their desire to read. The results show that visuals, audio, storyline, and gameplay are very influential in encouraging respondents to read in video games (Figure 3).

To gain more detailed data on how video games improve reading skills, 5 participants, aged 17, were asked to read a slightly complex short story. After reading, they were given a survey on their reading process. When asked about certain information regarding the short story, 3 of the participants were unable to recall it. Another question asked on the motivation to read the short story shows that 2 participants were not interested. Upon further questioning, it was understood that they could not stay focused when reading for an extended period and felt bored.

Next, all 5 participants were asked to play an excerpt of the researcher's product on video games about short stories, and a similar survey was given. The results show that all 5 participants could recall specific information when asked. Furthermore, they were very motivated to read the short story as a video game (Figure 4). The reasons given vary, but it can be summarised that the aspects of the video game make reading the short story more enjoyable compared to reading only the text.

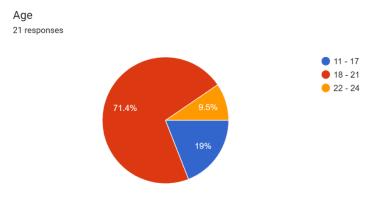
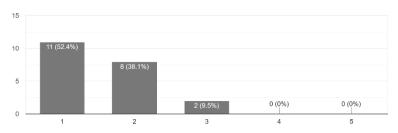


Figure 1. Responses to Survey Question 1



Do you think that reading skills can be improved through video games? (Example: Reading dialogues, instructions and storylines in video ga...Agree 3 - Maybe 4 - Disagree 5 - Strongly Disagree 21 responses

Figure 2. Responses to Survey Question 3



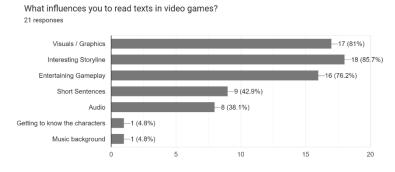


Figure 3. Responses to Survey Question 4

Rate your motivation when reading the short story through the video game. 1- Low 2- Neutral 3-High 5 responses

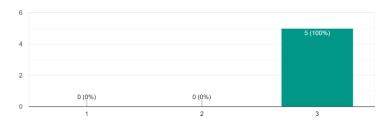


Figure 4. Responses to Pilot Study Question 3

CONCLUSION

In conclusion, this project which combines an e-book with video games, has the potential to assist adolescents in improving their reading skills. However, further improvements could still be made to accommodate buyers. Firstly, the researcher admits that access to video games is not flexible. It can only be played on a Personal Computer (PC). This undoubtedly narrows down the market scope since only some have a PC. It is recommended that the project could be made playable on other platforms, such as mobile phones. Furthermore, as the researcher is not experienced in programming, completing the video games consumed more time than expected. This made certain parts of the video games rough or unnatural. This could have been improved by asking for advice from individuals in the programming industry. Overall, the researcher believes this project is an interesting take on teaching aids.

REFERENCES

Bjädefors, B. N. (2018). From Rolling to Reading: An Analysis of the Adaptation of Narrative Between Role-Playing Games and Novels. https://lup.lub.lu.se/student-papers/record/8945073



- Cheung S.Y. & Ng K.Y. (2021). Application of the educational game to enhance student learning. *Front. Educ.* 6:623793. <u>https://doi.org/10.3389/feduc.2021.623793</u>
- Esposito, N. (2005). A short and simple definition of what a videogame is. https://summit.sfu.ca/item/258
- Friedrichs, H., Von Gross, F., Herde, K., & Sander, U. (2015). Parents' Views of Video Games: Habitus Forms in the Context of Parental Mediation. Journal of Media Literacy Education, 7(1), 58-64. https://doi.org/10.23860/jmle-7-1-6
- Griffiths, M. D. (2002). The educational benefits of videogames. Education and health, 20(3), 47-51. http://irep.ntu.ac.uk/id/eprint/15272/1/187769_5405%20Griffiths%20Publisher.pdf
- Kids First Pediatric Partners.(2014, May 19). *Stages of Adolescence*. <u>https://www.kidsfirstpediatricpartners.com/parent-education/stages-adolescence/</u>

Klieboer, B. (2022, March 6). *Playing video games may enhance reading skills, says USask study*. News. University of Sasketchewan. <u>https://news.usask.ca/articles/research/2022/research-playing-video-games-may-enhance-reading-skills,-says-usask-study.php</u>

