# Developing students' reading ability using visual novel for high school students

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## ABSTRACT

Recently, many students study from home and their class is conducted online. Many of them spend more time at home, and since their class is conducted online, most of the students must be able to utilize their smartphones. Because of this situation, the visual novel can be used to aid the students in studying English, especially for reading. The visual novel is a game that utilizes pictures with various sound effects to make the reader more interested in playing and watching the picture. This study is to develop a visual novel for education with the purpose to aid students in learning English. The research method utilized by the researcher in the development of a visual novel is a DDR (Design and Development) method. The participant in this research was ten tenth-graders from various schools in Surabaya. The instruments used in this research were questionnaires, structured interviews, and expert validation. The visual novel was validated by the expert before testing the game. This study find that Visual Novel can help students become more motivated to learn English especially reading and the response they gave toward using visual novel in aiding learning English is posstive. Several students also struggled with the game due to the students lack of knowledge. In conclusion, the visual novel has been proven to meet the students demand to aid in learning English. The implications of these findings are that the teachers should use media to create more positive learning environment.

**Keywords**: visual novel; media for education; reading

## INTRODUCTION

The impact of globalization on market activities has increased the number of EFL students around the world today. It is the result of English becoming the most widely used language in the world and being recognized as the language of global science culture. (Podhovnik: 2017). It has inspired people all over the world to learn. English is taught in schools, and even countries that do not speak English have adopted it as early as feasible.

Media is one of technologies can work as a problem solver. Media is very useful for the teacher because it can make students interested in material presentation and motivate their study as well. Media can be used as educational agents, whether television, social network, or video games. Video game has been applied as educational agents, the application of video game brought an innovation on learning potential subjects, such as Engineering, Health, History, and English (Hung, Yang, Hwang, Chu, and Wang, 2018). Gutierrez and Tyner (2012) stated that one component that plays a huge role in the digital era is media or online learning.

According to Park and Biddix (2017), digital media education has two practical goals: empowerment and security. The empowerment goal is to help young people understand how to make the best and most efficient use of mobile technology and media-based information, whereas the security goal is to keep teenagers safe from the negative effects of digital technologies and media. Games, according to Stakanova and Tolstikhina (2014), could inspire a variety of students by assisting their excitement and interest.

Furthermore, Bucking (2003) described media education as a media teaching and learning strategy in Alice (2010). As a result of differing ideas on media influence, there are at least five perspectives typically utilized by media literacy practitioners, according to a report produced by Alice in 2010. An inoculation approach, a pragmatic analytical approach, an innovative media approach, a

social participatory approach, and a media fun approach are among the five methods. The researcher chose this media fun approach because the researcher believes that the goal of this research is similar to and compatible with the media that the researcher used, which is a visual novel for reading skill.

A visual novel is a type of media that can be used by a teacher. The visual novel first appears in the 1980s with the game titled "Portopia Serial Murder Case" in 1983. Portopia Serial Murder Case became the first visual novel type game released on NEC PC-6001 in June 1983. The game was designed by Yuji Horii and published by Enix. Visual novels can help a teacher improve students' interest in reading, especially in middle and high school. A visual novel is a novel that is visualized in an illustration picture. The illustration picture has a conversation and the player can choose the plot of the story. In Japan, there are also comics called manga. The difference between manga and visual novel is that manga tends to be presented in a black and white format. In contrast, the visual novel presented in full color with various sound effects to make the readers playing it while in fact, they are reading it in a fun way.

Purnomo and Purnama (2013: 101) stated that visual novels combine novel and game because this combination of the visual novel contains interactive elements even though not as much as other game. Annie and Amanda (2015) stated that when games are designed with learning concepts in mind, they can improve student motivation, engagement, and learning. Game-based learning is more than just creating games for students to play; it is also about designing learning activities that gradually introduce concepts and lead users to the desired outcome. After all, this game focuses on the story presented. This media fun approach can make students study reading at the same time enjoying the game. In this way, it will not bore them. They easily find reading activity relaxing because they don't have to read long text.

Based on the theory mentioned above, visual novel can be categorized as a media fun approach. Visual novel offers not only some pictures but also some various sound effects to make the reader enjoy learning English especially reading. Furthermore, the visual novel that is currently available in the market did not have the genre for education. Thus, the researcher tought that it is necessary to develop visual novel for education to aid the students in learning English. The visual novel in this research is called 'School life in Japan'. The selected title 'School life in Japan' is designed for students to acquire some knowledge about school in Japan. The game itself is easily accessible because the researcher created it for smartphone devices, and anticipated that educators would utilize it as a tool in the classroom.

**METHODS**

The researcher utilised the method by Peffers et al. (2007), which is design and development Research. The framework stated by Peffers defined the issues, describes the objectives, arranged and developed the product, tested the product, investigated the outcome, and revealed the results. The researcher modified the framework into define issues, design and develop the media, verify the media by experts, test the media, and evaluate the test results.

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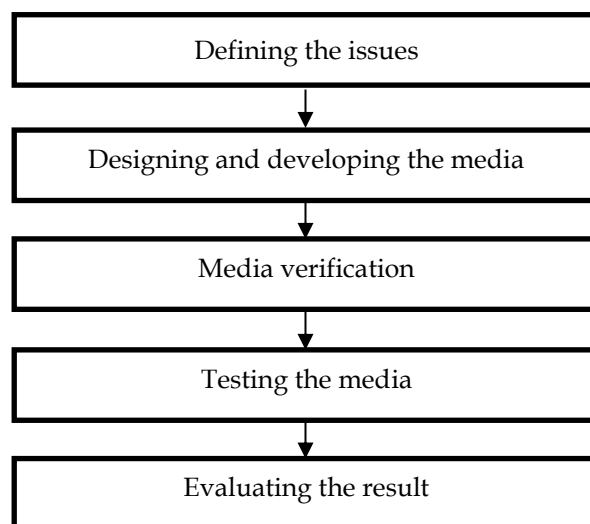
Figure 1. The steps of design and development research

Furthermore, the researcher asked expert to verify the media before it will be applied for users testing. The expert invited to suggest and put comment on the media to make the media better and reach the standard as educational media applicable in the classroom. The invited expert was the lecturer of Education from Muhammadiyah University in Surabaya. The location set for media testing activity to conduct the implementation of visual novel 'School life in Japan' is in Surabaya. With the current pandemic Covid-19, the researcher gathers the students in the researcher home. This field activity was conducted by obeying the protocol of covid-19 and seeing if the media's implementation has any issues. The player was tenth-graders from various high schools in Surabaya.

The expert validated the media by filling out the questionnaires given by the researcher related to content of visual novel 'School life in Japan' such as quality and materials used in the game. The questionnaire was designed to determine whether the media was qualified and applicable for classroom usage, as well as whether the information was appropriate.

## RESULTS AND DISCUSSION
### Defining the issue
The first issues that the researcher found is that the lack of innovation in teaching English especially reading. Most of the teacher still used the old-fashioned ways of teaching reading. This make the students feels that the reading is boring and they didn't like reading because they must read a long text.

Furthermore, the researcher also found that most of the visual novel that is currently available didn't support for education purpose. Most of the visual novel is only for student's enjoyment and some of them is not suitable for underage students.

After defining the issue, the research started observing the students and gathering information to see their preferences for making the visual novel. Since visual novel can be presented in many styles and the story's plot can be customized to suit the player. Purnomo and Purnama (2013: 101) stated that since a visual novel is a combination between novel and game that make this visual novel offering an interactive element in which the students can study reading while also creating the game's story. Because of this originality of visual novel game-based learning, the students don't get easily bored by only reading a long text.

### Designing and Developing the Media
The first step in designing and developing the media, the researcher started to collect the data first. The research data was from the student's syllabus and the materials that the students has already gotten. After that, the research began to ask if any of the students like to watch anime (Japanese animation) since visual novel mostly consists of anime. After getting students' preferences the

researcher began to make a plot or storyline based on the students' preferences. The researcher chose tenth-graders because they started to study English in middle school so that using visual novel would suit their class level. Studying English is very important right now especially from a young age, thus for the students who are already studying English in middle school and start to study it more seriously in high school, the researcher used media that can enhance their interest in learning English especially in reading. As a result of this, the researcher designed and developed a game called visual novel since most of them like to play games and watch anime. In addition to that, most students have smartphones right now. It makes it easier for them to play visual novel game.
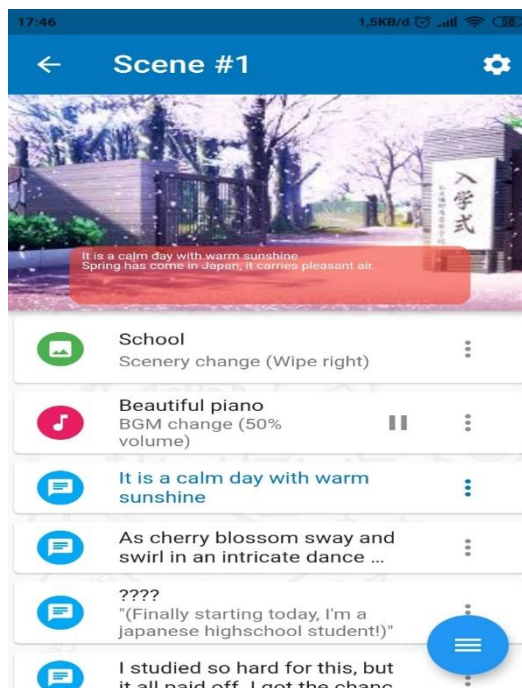


Picture 1. Blueprint of the game.

After collecting the data, the researcher began to make the blueprint of the game. The game's blueprint included how to storyline goes, what anime/picture included in the game, and the background music selected for the game. The important aspect was the game could be applied in the classroom. After that, the researcher began creating the game by selecting the platform for the game to work on. Considering the situation right now, the researcher finally chose to make the game playable on the smartphone since most of the students use gadget for online learning. Furthermore, visual novel mostly played in a personal computer there might be some difference between visual novel for personal computer and smartphone. The researcher creating the game aided by software to make it easier and coded it to make it applicable to play on the smartphone. After the game is completed, the researcher checked the game and fixed the bug where it is necessary.

**Media Verification**

The step after designing and developing the game was media verification. In this step, the research invites an expert to verify the media. The expert has offered comments and suggestions to the researcher on how to develop the media better by fulfilling the standard education for media that can be used in the classroom.

The aspect of the media that got verified by the expert are media quality and suitability. The expert that verifying the media was from the University of Muhammadiyah Sidoarjo. The expert verifying the media by filling the questionnaire sheets submitted by the researcher. The questionnaire that was verified by the expert consist of the media quality such as the format of the game, the chosen image, the font in the game, and the colors in the game. In addition, the questionnaire submitted to

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the expert also intended to approve the language selected in the game, the relevance of the content in the game, and the suitability of the game to be applied in the classroom.

The researcher then began to revise the game based on the comment and suggestion given by the expert. Eventually, the game is already verified by the expert and already fulfilled the requirement to be applied in the classroom.

Furhtermore, after the game is applied to the students. The feedback given by the students is that the game is very good, they like the design of the game because it's colorfull and using an anime character which suit their preference. Furthermore, for the language aspect of the game the students feel that its not difficult and they can understand it.

### Testing the Media

The next after media verification were testing the media. The game that has finished produced and verified by the expert then ready to get tested on the field. The researcher then sent the game to the student's smartphone since every student has their own. These steps are performed to obtain the results for the next step which is evaluating the results. The students who receive the game were 10 tenth-graders from various high schools in Surabaya.

The researcher began questioning the students before they play the game. The question that is asked by the researcher what material the students already get in the school to see if the material in the game is something they already know and understand. After that the researcher began to explaining the steps to operate the game, and what are they going to do. The participant was quite excited since for some of them it's their first time playing this kind of game and enthused how the game is going to be.

Since the game can be played on the participant's smartphone, it's quite time-saving since they don't have to wait for the other to finish before they can get their turn. After they finish the game or saving the game since the game can be saved and they don't have to play it from the beginning. The researcher then gives them a questionnaire about their response and their opinion after playing the game. After each participant filled the questionnaire, the researcher then began to interview them about their reasons for answering the questionnaire.

### Evaluating the results

The last step was evaluating the results. After the data that were obtained in the testing media phase, the next steps were evaluating the results. The questionnaire that was distributed by the researcher to the participant which the objective was to find out the participant response toward the game. The questionnaire that has 10 questions can be defined into three points.
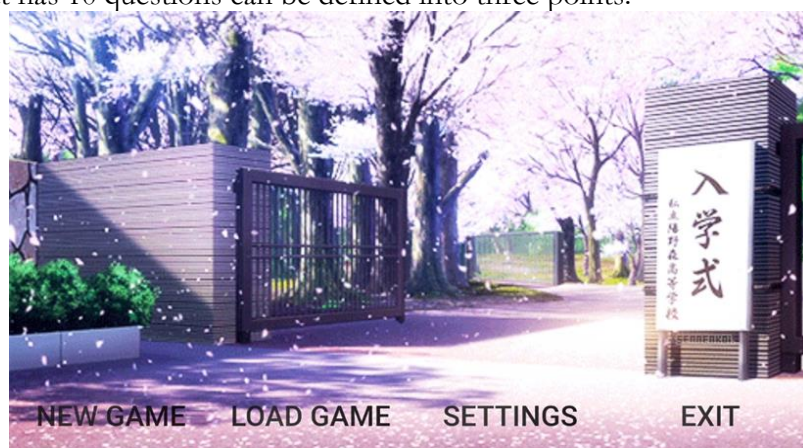


Picture 2. Tittle screen of the game.

Picture 3. Branch Story in the game.


Picture 4. Story in the game.

The first point is about the student's response toward the implementation of the game. The finding from the first point was the students were very satisfied and enjoyed playing the game. Since they didn't only read a long text but also has an animation or picture in the game, not only that they also get new knowledge since the story of the game is focusing on transfer students in Japanese high school. The students get to know new words, new cultures, and new experiences.

Afterward were the second points in which about the student's response toward the media design. Of 10 students, 8 of them felt that this is a new experience in reading and 2 of them stated that since they have played this game it's nothing new, but overall, it's quite an experience. The last point was about the material in the game. Most of the students felt that the words in the game are not that difficult even though some of them didn't understand some words.

The five steps to improve the media was adapted from Temaja (2017) and Peffers et al. (2017). Both defined the steps to improve the media, in which the students can have a pleasant environment when learning English. Certain necessities were required for choosing suitable media for teaching-learning activities. Ramdani and Muhammadiyah (2014) describe that learning goals, participant condition, and learning method were the necessities to choose suitable learning media. According to expert validation, the media should provide the learning objective which has the goal to improve students reading ability in learning English.

Furthermore, prior to the creation of the media, the syllabus was examined to ensure that the contents chosen were appropriate for the students' language level and complexity. The media can also be used in a group or on its own, with a basic description of how it was done. It will be necessary to successfully implement the medium in the classroom in order to facilitate learning processes.

In addition, the results showed from the questionnaire submitted to the expert, proved that the media is suitable and the characteristic of the media is acceptable. The media has remarkable aid to help students learning English even though the game has certain parts that needed to be adjusted. There is a requirement in creating a game as educational media. Jacob (2016) stated that games as

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educational media must have clear goals, visual, comprehensible instruction, relevant, and entertaining. As previously stated, the media used by the researcher aims to help students improve their reading ability by making them play the game since they didn't have only to read a text but also have pictures and sound effects that help entertain them. The game also has clear instructions and it's easy to play it. Furthermore, the game has function called saved and load to make them easier.

Furthermore, during the media implementation, the students were very enthusiastic about playing the game, and they had encountered some difficulties. They were not discouraged by the challenges, and in fact, they enjoyed playing the media even more as a result of them. As a result of the validation of material and media experts, observations made in field experiments, questionnaires, interviews, and a variety of revisions made in the production of this media, the findings revealed that the Visual Novel game meets the criteria and parameters for conducting learning activities.

## CONCLUSION

As a conclusion, visual novel can be used as a teaching aid for students to learn English because visual novel can offer the students not only knowledge but also an enjoyment. Furthermore, after completing the five modified phases of the DDR method outlined by Peffers et al. (2015) and Temaja (2017) the visual novel has been successfully established as an interactive digital learning game. Moreover, according to the results of the media and material expert questionnaires, the application has already met the requirements of effective media.

In addition, the result obtained from the field shows the visual novel is suitable and acceptable to be used in learning English, especially in reading activities. The researcher also found that the student's answers in the questionnaire and the interview has received good feedback, the students enjoyed playing the game and the game didn't make their reading boring.

Nonetheless, experts had already verified the Visual Novel Game and provided comments and suggestions; there were also some media shortages. When playing the game, students encountered a number of challenges. Especially if it's about culture and unfamiliar terms since the game provide them with culture in a different country. Furthermore, more research is required to improve the media that will be used at a specific level of the students. Their overall understanding was not harmed as a result of the issues that arose, as evidenced by their response.

As part of the measures required to develop a successful media, a number of suggestions regarding game application in the classroom should be addressed. The Visual Novel game caught the interest of tenth graders, indicating that it was effective in promoting and winning students' confidence in learning English.

Another suggestion is that the teacher be aware of the rules and provide guidance on how to play the game in order to avoid misunderstandings between students. However, further effort is needed to improve the Visual Novel game and the materials contained within so that this media can be used often in classrooms and by students of various levels.

## REFERENCES

Basol, H., & Sarigul, E. (2013). Replacing Traditional Texts with Graphic Novels at EFL Classrooms. *Procedia - Social and Behavioral Sciences*, *70*, 1621-1629. doi: 10.1016/j.sbspro.2013.01.231

Cain, K. (2010). *Reading development and difficulties: an introduction*. (BPS Textbooks in Psychology). Wiley-Blackwell

ERIC - *ED541603 - Children's and Young People's Reading Habits and Preferences: The Who, What, Why, Where and When*, National Literacy Trust, 2005-Dec

Fullerton, Tracy. (2014). *Game Design Workshop: A Playcentric Approach to Creating Innovative Games 3rd edition*. USA: CRC Press.

Jacob. (2016, May 17). *Top 7 Criteria of a Great Learning Game*. Retrieved February 18, 2018, from Motion Math Blog: motionmathgame.com/top-7- criteria-of-a- great-learning-game

Khoiriyah, Khoiriyah. (2019). An Enhancing Students' Reading Comprehension Through Jigsaw at Vocational High School. *English Education: Journal of English Teaching and Research*, *4*(1), 29-38. https://doi.org/10.29407/jetar.v4i1.12965

Morgan, P. L., & Fuchs, D. (2007). Is There a Bidirectional Relationship between Children's Reading Skills and Reading Motivation? *Exceptional Children*, *73*(2), 165–183. https://doi.org/10.1177/001440290707300203

Park, H. W., & Biddix, J. P. (2008). Digital media education for Korean youth. *International Information and Library Review*, *40*(2), 104–111. https://doi.org/10.1080/10572317.2008.10762768

Pho A, Dinscore A. Game-Based Learning Overview and Definition. Tips Trends Instr Technol Commitee 2015:1–5. doi:10.1007/978-1-4614-3185-5_38

Podhovnik, E. (2017). Language and Academic Identity: Sociolinguistic Aspects of English as a Lingua Franca in the Scientific Community. *PEOPLE: International Journal of Social Sciences*, *1*(2), 38–53. https://doi.org/10.20319/pijss.2015.12.3853

Peffers, K., Tuunanen, T., Rothenberger, M., & Chatterjee, S. (2007). A Design Science Research Methodology for Information Systems Research. *Journal Of Management Information Systems*, *24*(3), 45-77. doi: 10.2753/mis0742-1222240302

Purnomo, SF. Luthfie Arguby and Purnama, SF. Lukfianka Sanjaya. (2013). Mendesain Media Pembelajaran Bahasa Inggris berbasis Video Games. Surakarta: Fataba Press. Sanjaya, Wina. 2010. Penelitian Tindakan Kelas. Jakarta: Kencana Prenada Media Grup

Sanjaya, Wina. (2010). Penelitian Tindakan Kelas. Jakarta: Kencana Prenada Media Grup

Stakanova, E., & Tolstikhina, E. (2014). Different Approaches to Teaching English as a Foreign Language to Young Learners. *Procedia – Social and Behavioral Sciences, 146, 456-460.* https://doi.org/10.1016/j.sbspro.2014.08.154

Temaja, I. (2017). E-MATCHING GAME IN TEACHING ENGLISH FOR YOUNG LEARNERS. *PEOPLE: International Journal of Social Sciences*, *3*(1), 67-79. doi: 10.20319/pijss.2017.31.6779Van Der Geest, D. (2014). The Role of Visual Novels as a Narrative Medium. 1–27.

Ward, James. 1980. Technique of Teaching Reading. Washington: English Teaching Forum. Vol XVIII. Anne Civell Newton Editor

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