



## Designing Vocabulary Games By Using Hot Potatoes As Supplementary Material For Teaching

**Aulia Istiqomah**

Universitas Tanjungpura  
Auliaistiqomah42@gmail.com

**Received: 10/08/2024**

**Accepted: 10/09/2024**

**Published: 01/10/2024**

### Abstrak

Penelitian ini bertujuan untuk mengembangkan Word World, sebuah permainan elektronik yang dirancang untuk mendukung proses pengajaran dan pembelajaran kosakata. Fokus utama penelitian ini adalah pada proses pengembangan produk tersebut. Metodologi penelitian yang digunakan adalah penelitian pengembangan, dengan mengacu pada konsep pengembangan yang dikemukakan oleh David Jolly dan Rod Bolitho (2011). Tahapan dalam penelitian ini meliputi Identifikasi, Eksplorasi, Realisasi Kontekstual, Realisasi Pedagogis, dan Produksi Fisik. Partisipan penelitian ini terdiri dari 20 siswa kelas VII di SMP N 2 Pontianak serta 1 guru. Teknik pengumpulan data yang digunakan mencakup observasi, kuesioner terbuka, dan evaluasi internal. Aplikasi Hot Potatoes digunakan sebagai platform utama dalam pengembangan produk ini. Produk ini dirancang agar selaras dengan kerangka pengajaran TPACK. Berbagai materi kosakata dari sejumlah buku dan sumber digabungkan dengan aplikasi Hot Potatoes untuk mendukung pembelajaran kosakata dan melengkapi produk yang telah dirancang. Produk dan materi yang dikembangkan telah sesuai dengan kebutuhan target pengguna dan berhasil mencapai tujuan pengembangan.

**Kata Kunci:** Penelitian pengembangan, Kuis kosa kata Bahasa Inggris, Materi tambahan, Kosa kata

### Abstract

This study aims to develop vocabulary game named Word World, an electronic game that can be used for teaching and learning vocabulary. This research was conducted with a focus on how the product was developed. The research methodology used was development research by applying the development concept of David Jolly and Rod Bolitho (2011). The stages used in this research include, Identification, Exploration, Contextual realisation, Pedagogical realisation, and Physical production. The participants in this study were 20 students of VII class at SMP N 2 Pontianak and 1 teacher. This research used observation, open-ended questionnaire and internal evaluation. Hot Potatoes was used as the basic base in creating this product. This product is made as a media that is in accordance with the TPACK teaching framework. Several vocabulary materials from different books and sources were combined with the Hot Potatoes application for teaching vocabularies to complete the designed product. In summary, the product as well as the materials have been well developed and in accordance with the target users.

**Keywords:** A development research, English vocabulary exercises, supplementary material, vocabulary.

### Introduction

In this modern era, technology might facilitate students learning in an enjoyable experience, and teaching English with interactive multimedia is also becoming a popular topic and option chosen by current teachers. Besides, the use of media can have a positive impact on

students. According to Safer (2015), using media may create a better learning experience for students and teachers. It is because multimedia can aid colors, animations, pictures, sounds, and videos related to the material. Additionally, based on Birch & Sankey (2008), multimedia can represent the content knowledge in ways interconnected with different learners' learning

styles that may appeal to another model of preferences. Hence, teaching vocabulary by using multimedia is much recommended.

The pre – observational research conducted for three months when the researcher was doing her PLP program on SMPN 2 Pontianak found that the teacher already implied technology and media during her teaching and learning process. The media used by the teacher are mostly in the form of PowerPoint. The teacher rarely used any challenging game to make the students interested in learning English. Therefore, it drained the student's interest and motivation to participate in teaching and learning. Besides, the students only used one source for learning. It was a book that the students' borrowed from the school for free. However, this book did not give the students a complete feature to enrich their vocabulary. Therefore, the researcher concluded that the students need additional source to help them improve their vocabulary skills.

The use of technology is everyone's best friend in their daily lives, including the teacher and the students. Technology always accompanies and a part of their everyday activity. It is used for communicating, learning, finding information, socializing, teaching, et al. Both teachers and students mostly have their technology products, such as smartphones, mobile phones, laptops, and other technology devices. Therefore, the teacher and the students are already familiar with technology as it is their daily use, so it may not be a problem to include and use it in the teaching and learning process. It is also supported with the TELL theory that the researcher applied in her research.

There are many studies related to creating supplementary materials that many researchers have conducted. However, very little attention has been paid to combining it with technology and games, specifically by using Hot Potatoes. Trismiyati (2013) and Ratna (2017) research on designing supplementary materials have undertaken a similar study, showing that the author still uses written supplementary materials. The author developed the product by only adding interactive pictures and features to the book. The researcher found that it only slightly differs from the students' old book. There is also similar research related to the use of Hot Potatoes to design the supplementary material conducted by Lukmanul Hakim (2021) and Safer and Salam (2015), which make English vocabulary exercises for the students. However, none of them focused

on making the media for junior high school students, as both authors focused on making the materials for elementary and vocational school students.

Therefore, based on those problems, the researcher triggered to fill in the gaps by creating vocabulary games by using Hot Potatoes Software that used as a medium for junior high school students to learn vocabulary. Hot potatoes-based materials contains pictures, interactive quizzes, instructions, and activities.

### **Method**

In this study, the researcher focused on designing supplementary material for teaching English vocabulary in Junior High School. Therefore, the researcher employed Research and Design (R&D) method as the most appropriate method. According to Hanafi (2017) Research and Development (R&D) is a research method used to produce a particular product and test the effectiveness of the method. Specifically, in educational field, research and development or Research and Development (R&D), is a research method used to develop or validate products used in education and learning. From the description, it can be concluded that Research and Development is a research methods that aim to produce certain products and find out the validity and the effectiveness of the product. The researcher believed that this method will help the researcher to conduct the research well.

In conducting this research, the reseacher adapted the model of study by Jolly & Bolitho (2011) which consists of six steps. They are identification of the problems, exploration of needs, contextual realization, pedagogical realization, physical production, use, and evaluation. This method is suitable to be applied in developing learning materials or other learning products. However, the researcher conducted the steps without having the use phase and evaluation phase.

### **Result and Discussion**

#### **Identification of Needs**

In this process the researcher interviewed both the teacher and the students. The researcher also observed the students in the process of teaching and learning process. The researcher also observed the teachers while teaching in the class in order to find out about the technique and method that the teacher used for teaching the students especially in teaching vocabulary. The researcher performed semi – structured interview in this research. As stated by

(Adams, 2015) semi – structured interview can gather major information in a simple and descriptive way. By analyzing the needs, the researcher found the information about condition and situation of the students in the classroom, and also the preferences of the students toward the design of the media.

#### Exploration of needs

In this step, the researcher explored four Important points in designing the vocabulary games named Word World. The points are: objectives, syllabus, language, and skills. In this step, document from the school curriculum is important. The researcher has found out that the curriculum used in SMPN 2 Pontianak is Kurikulum Merdeka Belajar. The existing textbook also become the consideration to make the product become good and suitable for the students' competence. From doing the exploration of needs, the researcher decided to focus on vocabulary skills for its product.

#### Contextual realization of materials

There are three points that is being focused in this step. They are topics, contexts, and text. In this step, the researcher chose the suitable topics based on the students' needs in the identification of needs, but the topics are still related to the syllabus and the curriculum. The researcher made the materials adapted from the students' book in order to fit with the students' need, level and preferences in learning English. In this research, the researcher decided the topic based on the students' needs and preference which the researcher get from the interview. The researcher made the draft of the media from the materials and the student's need. For the text, the researcher used the text from the internet and modify some of it in order to make it fit with the students' level.

#### Pedagogical realization of materials

The fourth step is pedagogical realization of materials. In this step, the researchers focused on the task and instructional goals that the learners need to achieve while using this media. The researcher made the exercise and activities that used in the media by looking at the curriculum and syllabus that the students' used in the school. The exercise made by the student's level of competence. The researcher also made the exercise in purpose to make the students' motivated and excited to learn English.

#### Physical Production

The researcher made an online vocabulary game by using Hot Potatoes software as the main tools. The researcher gathered and selected the material from the book that the students' used and also sources from the internet. The researcher combined and developed the material to design the

Vocabulary Games named 'Word World' media. The researcher made the section of the game based on the topic of the material. The researcher developed the design of the vocabulary media. The researcher added sounds, pictures, and videos related to the material from various sources to the 'Word World' media to make it more interactive.

#### Product Description

The name of the product created by the researcher is 'Word World'. This is a website that enable the students to play a vocabulary game in order to practice and improve their vocabulary. The website can be accessed freely as long as the internet is available. There are various level and type of exercised that the students can play. This product is created to support the English teacher in teaching English vocabulary, particularly the teacher in the senior high school.

The final product designs look likes presented in the product below. In the first picture, the researcher presented the home page of WordWorld.

Picture 1. Home Page of Word World



There are four main menus in the website, such as home, chapter 1, chapter 2 and chapter 3. In every chapter there are five different levels that contained 10 to 20 questions in each level. The material in every chapter were made based on the books. Chapter 1 focused on the Chapter 1: About Me. Chapter 2 focused on the Chapter 2: Culinary and Me. Chapter 3 focused on the Chapter 3: My Favorite Snack. In each chapter there are 5 different levels that the researcher create. In each level the kind of the quiz is different. There are multiple choice, essay, fill in the blank, matching and crossword kind of quiz.

In each chapter the researcher provided five different levels of vocabulary games that the students can play. The kind of the exercise is varied, there are multiple choice, fill in the blank, matching pictures and crosswords.

Additionally, according to the syllabus and curriculum in the school, the teacher can use this

vocabulary games based on the teacher's need. As mentioned above, the researcher created this vocabulary games separately I several parts, so the teacher and the students can flexibly use it as the supplementary materials to learn English. The teacher can also combine other teaching activities with this vocabulary game.

The researcher provided the software of the file for the teacher. The teacher can also add and edited the file as she wish. The teacher can match it with the needs of her. It can be a good alternative too for the teacher and students in learning English. The researcher really hopes that this product can be used in the future.

The researcher named the product as "Word World". Here the researcher created the games duration for one hour teaching long or similar to 50 minutes. In the first 5 minutes part, the product contained the direction of how to answer all the games. Then, in the next 30 minutes, the students can use it to answer or do all the games that contained in the product. For the last 15 minutes, it can be used to discuss the answer of the games. The discussion can be done either with peers, teachers or parents. There would be four different kind of games which designed by using "Hot Potatoes" and "Webpage Maker". This software will enable the researcher to add pictures, video and voice. The researcher can also designed the product freely to make it more interactive for the students to learn vocabulary.

The third aspect is the choice of the media. In designing media, it is crucial to choose the pictures or video carefully. The researcher must choose the media which can help the students to achieve the learning objectives that in line with the curriculum used in the school. In this study, the researcher decided to design a game that include colourful and interactive pictures to support the teaching and learning process in Junior High School. The researcher chose to use "Hot Potatoes" software to create the electronic game because of the software's accessibility.

The chosen software that the researcher use in this research is "Hot Potatoes" and "Webpage Maker". Hot potatoes is a free software since 2009 and has been designed by the TESL department of the university. Hot Potatoes software is free and has been used by many educational institutions. Hot potatoes are known as a bank-making tool for making a quiz. Hot Potatoes enable the user to create quiz interactively in a way that can make the students interacted with the media. It is in line with the aim of this software to be a learning tool for question – making. Hot Potatoes consist of six

programs that can be used to create interactive web – based materials which can be used to convey the materials in the teaching and learning process. This software also provided a lot of tools to make a fun game and can be combined with the other media in supporting the product's development. The researcher can also able to edit each type of game before combining all the game in one unit.

After the researcher finished making the quiz by using Hot Potatoes, then the researcher continues to create the web pages by using "Webpage Maker" software. The researcher chose this software because of the background that the researcher has. Besides, it allows the researcher to create and upload web pages in minutes without knowing HTML. The researcher can simply drag and drop objects onto the page and position them freely in the layout. It also comes with some pre-designed templates that help.

## Conclusion

The conventional and traditional way of teaching English for the students, during the teaching process, which influenced their motivation in learning English and the lack of appealing source in term of media and book for the students are being the problem for the students in learning vocabulary.

Supplementary materials with a technology – based and Web – based games specifically "Word World" is be one of the solutions to solve those problems. In this modern era, technology might facilitate students learning in an enjoyable experience, and teaching English with interactive multimedia is also becoming more popular. Word World as a vocabulary game was designed by using the software named "Hot Potatoes". Word World was designed based on the teachers' and students' needs and preferences. The researcher was conducted interview with both of the students and a teacher of SMPN 2 Pontianak in order to gather the data. The researcher interviewed two classes they are 7A and 7B as the sample of the interview and took 5 students from each class as the representative. The researcher also interviewed one of the English teachers as the representative. The data used as the basis to design the media. This vocabulary games were also designed based on the learning objectives from the curriculum.

This vocabulary game was designed by adding some media such as pictures and videos. The researcher was also collaborated different kind of background and colours in order to make the media looks more interactive. The researcher created the games duration for one hour teaching long or similar to 50 minutes. In the first 5 minutes part, the product

contained the direction of how to answer all the games. Then, in the next 30 minutes, the students can use it to answer or do all the games that contained in the product. For the last 15 minutes, it can be used to discuss the answer of the games. The

discussion can be done either with peers, teachers or parents

## References

- Ansell, A., & Adams, W. C. (2015). Conducting semi-structured interviews. In K. E. Newcomer, H. P. Hatry, & J. S. Wholey (Eds.), *Handbook of practical program evaluation* (pp. 492–505). John Wiley & Sons. <https://doi.org/10.1002/9781119171386.ch19>
- Brown, H. D. (2007). *Principles of language learning and teaching* (5th ed.). Pearson Longman.
- Hanafi. (2017). Konsep penelitian R&D dalam bidang pendidikan. *Saintifika Islamica: Jurnal Kajian Keislaman*, 4(2), 129–150.
- Jolly, D., & Bolitho, R. (2011). A framework for materials writing. In B. Tomlinson (Ed.), *Materials development in language teaching* (pp. 107–134). Cambridge University Press.
- Leow, F.-T. (2014). Interactive multimedia learning: Innovating classroom education in a Malaysian university. *The Turkish Online Journal of Educational Technology*, 13(2), 99–110.
- Lukmanul Hakim, A. (2021). Designing EVE (English Vocabulary Exercises) by using Hot Potatoes as supplementary material for teaching vocabulary to elementary level students. *Language and Education Journal*, 6(2), 105–122. <https://doi.org/10.52237/lej.v6i02.285>
- Mansyur, U. (2016). Inovasi pembelajaran Bahasa Indonesia melalui pendekatan proses. *Retorika: Jurnal Bahasa, Sastra, dan Pengajarannya*, 9(2), 6. <https://doi.org/10.26858/retorika.v9i2.3806>
- Nunan, D. (Ed.). (2003). *Practical English language teaching*. McGraw-Hill.
- Safer, F., & Salam, U. (2015). Developing Hot Potatoes-based materials for English teaching and learning at SMK. *Journal of Equatorial Education and Learning*, 4(1). <http://dx.doi.org/10.26418/jppk.v4i1.8664>
- Sankey, M., Birch, D., & Gardiner, M. (2010). Engaging students through multimodal learning environments: The journey continues. *International Journal of Educational Development Using ICT*, 6(1), 50–63.
- Trismiyati. (2013). *Developing English supplementary materials for children at Panti Asuhan Aisyiyah Yogyakarta*. Universitas Negeri Yogyakarta. <http://eprints.uny.ac.id/id/eprint/25719>