



Wordwall-Based Digital Media to Stimulate Students in Learning English Vocabulary

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Abstrak

Dalam era digital saat ini, media pembelajaran konvensional sering kali dianggap kurang menarik bagi siswa, terutama di tengah dominasi teknologi dalam kehidupan sehari-hari. Penggunaan media digital seperti Wordwall, sebuah platform pembelajaran interaktif yang menawarkan berbagai permainan edukatif, diyakini dapat meningkatkan minat dan motivasi siswa dalam belajar. Berdasarkan temuan sebelumnya, penelitian ini berfokus pada pembuatan media Wordwall untuk mengajarkan kosakata bahasa Inggris kepada siswa kelas 5 SD. Siswa belum pernah memanfaatkan media pembelajaran yang dirancang untuk pembelajaran kosakata. Penelitian ini menggunakan paradigma penelitian Design and Development (DnD) untuk mengkonstruksi media pembelajaran berupa Wordwalls. Model penelitian DnD terdiri dari tiga tahap utama: desain, pengembangan, dan penilaian. Catatan peneliti, lembar validasi, penilaian ahli, dan kuesioner pengguna merupakan instrumen yang digunakan dalam penelitian ini. Subjek penelitian ini adalah siswa kelas 5 SD. Hasil utama penelitian ini menunjukkan hasil yang signifikan hal ini menunjukkan bahwa media yang dikembangkan sangat baik dan layak digunakan. Penelitian ini bertujuan untuk mengidentifikasi bagaimana penggunaan Wordwall dapat membantu siswa dalam menguasai kosakata baru, memperkuat ingatan mereka, serta meningkatkan keterlibatan mereka dalam proses pembelajaran. Implikasi penelitian ini menunjukkan bahwa penggunaan media digital berbasis Wordwall memiliki potensi yang signifikan untuk merangsang minat dan motivasi siswa dalam mempelajari kosakata bahasa Inggris. Dengan mengintegrasikan Wordwall dalam kegiatan pembelajaran, guru dapat menciptakan lingkungan belajar yang lebih interaktif dan menarik, sehingga dapat meningkatkan keterlibatan siswa dan mempercepat proses pemahaman kosakata baru.

Kata Kunci: Wordwall, Media, Kosakata, Pengajaran

Abstract

In the current digital era, conventional learning media are often considered less attractive for students, especially amidst the dominance of technology in everyday life. The use of digital media such as Wordwall, an interactive learning platform that offers various educational games, is believed to increase students' interest and motivation in learning. Based on previous findings, this research focuses on creating Wordwall media to teach English vocabulary to 5th grade elementary school students. Students have never used learning media designed for vocabulary learning. This research uses the Design and Development (DnD) research paradigm to construct learning media in the form of Wordwalls. The DnD research model consists of three main stages: design, development, and assessment. Researcher notes, validation sheets, expert assessments, and user questionnaires are the instruments used in this research. The subjects of this research were 5th grade elementary school students. The main results of this research show significant results, this shows that the media developed is very good and suitable for use. This research aims to identify how using Wordwall can help students master new vocabulary, strengthen their memory, and increase their involvement in the learning process. The implications of this research indicate that the use of Wordwall-based digital media has significant potential to stimulate students' interest and motivation in learning English vocabulary. By integrating Wordwall in learning activities, teachers can create a more interactive and interesting learning environment, thereby increasing student engagement and speeding up the process of understanding new vocabulary.

Keywords: Wordwall, Media, Vocabulary, Teaching

1. INTRODUCTION

In today's digital era, education is no longer limited to conventional classrooms. Technological innovations have opened the door to more interactive, engaging and adaptive learning experiences. One of the tools leading this revolution is the Wordwall application. Effective and enjoyable learning will help students become more motivated and learn in a varied way. In this day and age, the use of digital media has become commonplace, especially

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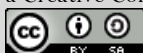
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in language learning. Young learners at the elementary school level (approximately three to twelve years old) are cognitively ready to acquire language skills in a way that is consistent with integrated skills and a content- and experience-based approach (Novianto & Abidin, 2019; Tegeh & Kirna, 2020). English learning is based on the existing curriculum. The curriculum is the foundation or root of education itself to control the quality and regulate what kind of education can be developed according to the circumstances or needs of students at a certain time. Use of the book "My Next Words" as a material guide used by elementary school children in learning English. This book is used by students in the current independent curriculum. As an international language, English is considered an important language to learn. The curriculum and pedagogy of English as a foreign language have emphasized the importance of teaching communicative strategies and the use of functional language so that the aim of teaching and learning English is to communicate well (Imaniah, 2020; Lelawati et al., 2018). Early childhood is very suitable for learning language because their memory and imitation are still very good. One of the main elements in English is vocabulary. Success in learning a language is largely determined by the amount of vocabulary that has been learned. Therefore, everyone who wants to learn a language well must increase their vocabulary. The large number of students who lack vocabulary knowledge at school will hinder language learning. the importance of knowing a wider vocabulary to improve the quality of students' language. There are several aspects that can be used as a reference that someone has good vocabulary knowledge.

Previous research findings reveal that understanding meaning, word use, word formation, and grammar are part of having a good vocabulary. Explanations of these aspects include: meaning is an understanding of what words mean in different contexts and how these words can be used to convey certain messages or information; word use is an understanding of how words are used in certain contexts such as the use of words in real communicative situations and how to teach them to students; word formation is the meaning of knowing how words are spelled and how they sound; word grammar is the grammar of the words in a sentence and the way they interact with other words to form a correct sentence structure (Fazriyah et al., 2020; Findawati & Suprianto, 2019). There are various aspects that make vocabulary learning in Indonesia less interesting, such as the teaching methods that are often used are conventional and monotonous. Students are given a list of words that must be memorized without any connection to the context of everyday life. In teaching vocabulary, teachers need appropriate strategies, methods and materials to be able to develop material according to students' needs (Aeni et al., 2022; Alkalah, 2016). Apart from that, appropriate learning media must also be used to increase student motivation during the learning process. If an English teacher for young learners does not use appropriate media in teaching, students may become disinterested and demotivate themselves from learning. Teachers should look for learning media that contains fun and interesting learning activities that can increase young people's learning motivation even in online learning situations. One of the effective learning media that can be used by teachers of young learners to increase student motivation in learning vocabulary is Wordwall. Therefore, the researcher tried to develop Wordwall-based digital media for learning English vocabulary using reference material in the textbook "My Next Words" for 5th semester students at SD Negeri 1 Baktiseraga. With the addition of this media, it will provide variation in student learning and increase vocabulary knowledge in a fun way in the form of a web-game. Apart from that, it activates and improves students' thinking, abilities, language, character and attitudes. The aim of this research is to explore the effectiveness of using Wordwall-based digital media in stimulating interest and improving students' understanding of English vocabulary. Wordwall as an interactive learning platform offers various educational games that can motivate students to learn in a fun and dynamic way. This research aims to identify how using Wordwall can help students master new

vocabulary, strengthen their memory, and increase their involvement in the learning process. Thus, it is also hoped that this research can contribute to teachers and educational practitioners in developing more interesting and effective English language teaching methods.

2. METHOD

This research uses the Design and Development (DnD) model with the Instructional Design and Technology type. This research involves 3 phases of ADDIE, including: Design, Development, and Evaluation.



Figure 1. Research Steps

Based on [Figure 1](#), there are three main stages that researchers will carry out to develop learning media in the form of Wordwall. The first is the Design phase. At the design stage the researcher carried out several activities, in this stage the following activities were carried out: Conducting observations to collect information and analyze what products users need and what is the target of this research, Conduct interviews with 5th grade English teachers to find out the characteristics of students and what media the teacher uses when teaching, Analyzing teaching modules, especially for class 5 semester 1, taking into account learning objectives, indicators and student materials. After that, the researcher designed a blueprint for designing media into Wordwall. The next stage is development, the researcher begins to create a product in the form of Wordwall media by inserting material into the Wordwall which is listed on the blueprint, then carries out several revisions which are given to the experts. And the final stage is evaluation, at this stage researchers carry out media feasibility tests on experts and users. Three types of instruments were used in this research: expert assessment sheets, blueprints, and research notes. (4) Page for instrument validation; and (5) User questionnaire. Content evaluation sheet, media, expert assessment and expert assessment. Meanwhile, User Questionnaire, accepted. Before use, the expert assessment tool that has been modified is first verified using the Cross Tabulation table of instrumen ([Azizah, 2020](#); [Burhanudin Ata Gusman et al., 2022](#)). Researchers will first collect difficulties through initial observations, interviews, and syllabus analysis. Here, research notes will be used to document the main ideas from the previous activity. This research focused on an English teacher who specifically taught fifth grade students throughout the first semester of the school year. Second, researchers prepare a design plan that becomes the basis for making media. Third, user questionnaires and expert assessments will be used to assess Wordwall media. The formula that will be used to calculate data regarding the results of expert product evaluations. In addition, the level of achievement that will be used to qualify the results and determine whether or not product revisions are necessary is proposed ([Caron & Markusen, 2016a](#); [Dewanti & Sholihah, 2022](#)). Achievement Level showed in [Table 1](#).

Table 1. Achievement Level

Achievement Level (%)	Qualification	Information
85-100	Very good	No need for revision
75-84	Good	No need for revision
64-74	Enough	Needs revision

Achievement Level (%)	Qualification	Information
55-64	Bad	Needs revision
0-54	Very poor	Needs revision

3. RESULT AND DISCUSSION

Result

Based on initial observations carried out at SD Negeri 1 Baktiseraga, it was found that the English teacher taught 5th Class students rarely use media when learning English and teachers lack time to create learning with a different atmosphere, namely by using learning media in the form of games. After observing, students felt bored when learning took place. Apart from that, the lack of student motivation in learning will make students not focus during learning. This happens because of the lack of learning media that is fun for students, therefore researchers are trying to develop learning media called Wordwall which is specifically for learning English vocabulary using the book "My Next Word" as a material guide, this media has never been used. by previous teachers. Researchers used various methods in the process of developing Wordwall as a medium for learning English vocabulary. The design, development, and assessment phases are included in the overview of these techniques presented in [Table 2](#).

Table 2. *Research Stages and Research Procedures*

Research Phase	Procedure
Design	<ol style="list-style-type: none"> 1. Make and carry out observations. 2. Conduct an interview with an English teacher. 3. Analyze the English module used for 5th Mark 4. Designed the blueprint for the Wordwall product
Development	<ol style="list-style-type: none"> 5. Creation of Wordwall products based on blueprint designs 6. Making the final product after making several revisions.
Evaluation	<ol style="list-style-type: none"> 7. Validating the Instrument 8. Implement Member Evaluation Sheet 9. Carrying out User Evaluation using a questionnaire

This time, researchers analyzed using observations, interviews for English teachers, analyzing teaching modules for 5 peopleth class students at SD Negeri 1 Baktiseraga. In this stage, the following activities are carried out: make an observation sheet and make observations. At this stage, an observation sheet was developed to collect information and analyze what products users need and what is the target of this research, conduct interviews with 5th class English teacher to find out the characteristics of students and what media the teacher uses when teaching, analyze special teaching modules for class 5 semester 1 by considering learning objectives, indicators and student material. After collecting information regarding the media to be developed, the researchers began designing a blueprint as a guide that would later be used on Wordwall. There are several categories listed in the blueprint, such as: topic, learning indicators, type of game, vocabulary targets, and number of questions. At the development stage, researchers began preparing Wordwall media by sorting templates according to the blueprint that had been designed for use in learning media. Here the researcher developed the Wordwall learning media using the book "My Next Words" as a material guide used by teachers for grade 5 students. The researcher used 5 chapters of

material in the book, where each chapter contains 4 aspects of vocabulary. So a total of 20 games were created using 9 different Wordwall templates. Each game includes 10 questions. The template used is: *Gameshow Quiz*, *Find a Match*, *Anagram*, *Unjumble*, *Match*, *Composing Sentences*, *Flash Cards*, *Quiz (Multiple Choice)*, and *Crossword Puzzles*. Then the researcher enters the material into the template that has been selected according to the blueprint. The images used are available on Wordwall, and some of the images used were taken from Pinterest because they are not yet available on Wordwall. Finally, the researcher carried out several revisions to questions that were unclear and revised the instructions because they were inaccurate. Finally, the researcher created the final product in the form of a pdf containing topics, vocabulary aspects, types of games, links to each game and screenshots of the game itself.

Evaluation is carried out next after the product is developed. When creating Wordwall, a tool for learning English vocabulary, both experts and users evaluated it using an Expert Rating Sheet and a User Questionnaire. By using Achievement Levels and data categorization methods. The results of the assessments of two experts and six users will be calculated to determine whether or not media changes are necessary. Based on the results above, the first jury gave a score of 92.7% for Wordwall content and entered it in the very good category. The second jury gave a score of 94.5% and categorized it as very good media. For Wordwall media, the first jury gave a percentage of 90% which was categorized as very good media. The second jury gave a percentage of 96% which was categorized as very good media. The total percentage of expert assessments for content is 93.6%, while the total percentage for media is 93%. Various content and digital media developed using the Wordwall web application are excellent media for teaching English vocabulary. This means that the Wordwall does not need to be revised based on the level of achievement. The final stage is the evaluation stage. At this stage the researcher begins to collect information about the results of the product that has been developed, assessing its feasibility based on input from respondents. Wordwall's web-based game product in English vocabulary learning was evaluated by users who had tried the game, including an English teacher and five 5th grade students from the first semester. They were given several statements regarding the quality of the media provided by researchers, totaling nineteen statements. Based on data analysis, there are 5 users who took part in the assessment of the Wordwall web game. The teacher's total score was 89 and the percentage after calculation was 93.7%. Meanwhile, the first student's score was 92 and the percentage after calculation was 96.8%. The second student's total score was 91 and obtained a percentage after calculation of 95.8%. The third student's total score was 91 and the percentage after calculation was 95.8%. The total score of the fourth student is 87 and the percentage after calculation is 89.47%. The total score of the fourth student is 90 and the percentage after calculation is 94.7%. and the fifth student's score was 89 and the percentage after calculation was 93.7%. The total score obtained from all users is 542 and the percentage obtained after calculation is 95%. The Wordwall media developed is included in the "very good" media category. This means that Wordwall-based digital media does not need to be revised based on the level of achievement.

Discussion

Applications are developed based on blueprints created with existing learning objectives in mind. Questions or vocabulary targets on Wordwall media are given in accordance with the indicators and learning objectives in the book (Dotutinggi et al., 2023; Eviota & Liangco, 2020). To vary learning in class, teachers can use additional media such as Wordwall to motivate students in learning, especially in vocabulary learning. Previous research findings reveal that there are four aspects that can be said to be someone who has mastered or is proficient in vocabulary, including: *meaning*, *word use*, *word formation*, and

word grammar(Novita Sari et al., 2024; Santosa et al., 2021). The use of this media is also very helpful for teachers when teaching in class because it is very efficient and does not interfere with the effectiveness of student learning(Caron & Markusen, 2016b; Dewanti & Sholihah, 2022).. This media can be said to be suitable for teaching English vocabulary for grade 5. There are advantages to using this media, this media is online based which can be accessed anywhere that has an internet network and is easy to use according to the instructions given (Khofifah Indra Sukma & Trisni Handayani, 2022; Nisa & Susanto, 2022). Wordwall-based digital media can significantly stimulate students' interest in learning English vocabulary. Through the use of various types of interactive games such as word puzzles, word matching, and time-based quizzes, Wordwall creates a more dynamic and fun learning environment. The results of observations and interviews show that students feel more motivated and actively involved during learning, which has a positive impact on mastering new vocabulary(Soraya, 2024; Yafa et al., 2022; Yanti et al., 2023). Additionally, Wordwall's interactive features that enable repeated learning and instant feedback help students strengthen their retention of learned vocabulary. These findings are in line with constructivist learning theory which emphasizes the importance of active involvement and interaction in the learning process. However, this research also found several challenges, such as the need for a stable internet connection and suitability of content to varying student ability levels. Therefore, further adaptation and development of this media needs to be considered to optimize its use in various learning contexts(Sd & Kartasura, 2024; Septriani & Rustandi, 2023). The findings of this research indicate that Wordwall-based digital media has significant effectiveness in stimulating students to learn English vocabulary, in line with previous research that highlights the benefits of using technology in language education.

This research supports the results of previous research which shows that educational games and interactive digital platforms can increase students' motivation and involvement in learning a foreign language. However, these findings also reveal that Wordwall, with its interactive features and flexibility in learning content design, offers additional advantages compared to other digital media that may be less engaging or too complex for students. Previous research that used digital media such as flashcard or video-based learning applications was often less effective in maintaining student interest in the long term. In contrast, the use of Wordwalls that focus on word games and dynamic quizzes has proven to be more effective in increasing student engagement and sustained vocabulary mastery. However, as also found in previous studies, challenges such as access to technology and the need for adaptive learning design remain important factors that must be considered to maximize the effectiveness of digital media in education. The implications of this research indicate that the use of Wordwall-based digital media has significant potential to stimulate students' interest and motivation in learning English vocabulary. By integrating Wordwall in learning activities, teachers can create a more interactive and interesting learning environment, thereby increasing student engagement and speeding up the process of understanding new vocabulary. In addition, the results of this research can encourage further development of technology-based learning methods that can be adapted for various subjects, not just English. Using Wordwall can also be an effective solution for distance learning or online learning, considering the flexibility and accessibility of this platform. Therefore, the results of this research are important for educators and educational policy makers to consider in designing curricula and learning strategies that are more innovative and in line with current needs. This study has several limitations that need to be noted. First, the use of Wordwall-based digital media is highly dependent on the availability of adequate technological infrastructure, such as stable internet access and compatible devices, which may not be available in all schools, especially in remote areas. Second, this research only involved a limited sample of one group of students in one educational institution, so the results may not

be generalizable to a wider population with different characteristics. Third, assessments of Wordwall's effectiveness in improving students' English vocabulary are largely based on short-term tests and observations, so its impact on long-term retention has not been fully explored. Based on these limitations, recommendations for future research are to expand the research sample to include different levels of education and different geographic locations, as well as conduct a longitudinal study to evaluate the long-term effects of Wordwall use. Apart from that, further research is also recommended to develop more adaptive learning strategies and combine various digital tools to overcome limited access to technology, so that the benefits of digital media in English language learning can be optimized to a greater extent.

4. CONCLUSION

From this research it can be concluded that there are several problems that occur in the English vocabulary learning process related to digital media, so this research aims to develop a web-based English vocabulary learning game for 5th grade elementary school students as a learning medium. In developing Wordwall-based digital media using the book "My Next Words". The novelty of this research is that it makes this book a reference for researchers as a source of student material. In developing Wordwall-based digital media, researchers went through several stages of ADDIE, namely, design, development and evaluation. The quality of this web-based English game is considered a very suitable medium, meaning it can be used as a learning medium in teaching English for grade 5 in grade 1.st semester at SD Negeri 1 Baktiseraga.

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