Utilization of Wordwall as An Application for Elementary School Thematic Learning Evaluation

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Article Information:	ABSTRACT
	This research is motivated by the problem of boredom and lack of student motivation in participating in learning evaluations that tend to be monotonous in elementary schools. This study aims to reveal the benefits of using Wordwall as an interactive thematic learning evaluation tool. This study uses a qualitative method with a descriptive approach, where data is obtained through interviews with fifth-grade teachers at an elementary school in Bandar Lampung. The study results indicate that using Wordwall increases student engagement and enthusiasm in participating in the evaluation. In addition, Wordwall allows teachers to create more creative and varied assessments and provide direct feedback to students. Although several obstacles exist, such as the need for an internet connection and paid features, Wordwall has proven effective in increasing student learning motivation. Further research is recommended to explore the use of Wordwall at various levels of education and subjects and discuss the development of Wordwall features to be more flexible and easily accessible without technological limitations.

INTRODUCTION

Saturation in learning is a common challenge in classrooms, often arising from a lack of innovation, monotonous teaching methods, and ineffective communication between educators and students (Hasram et al., 2021). This stagnation in the learning process can lead to disengagement and a lack of enthusiasm among students. To create a more dynamic and enjoyable learning environment, it is essential to address these issues by implementing new strategies that promote student interest and active participation. One effective approach is the careful selection of appropriate learning evaluation platforms (Noptario & Prastowo, 2022). Traditional evaluation methods, such as written tests with multiple-choice and essay formats, while still widely used (Aqmarani et al., 2021), can feel repetitive and burdensome for students. These conventional assessments often fail to capture a student's full range of skills, creativity, and critical thinking, potentially limiting the depth of their learning experience. In contrast, the integration of online learning tools presents new opportunities for more engaging and interactive forms of evaluation. A notable advantage of online education is the wide variety of digital platforms available for learning assessment (Dor & Shmuel-Nir, 2023). These tools can offer immediate feedback, gamified learning experiences, and a broader range of assessment formats, which appeal to diverse learning styles and preferences. As students become increasingly adept at using technology, incorporating these tools aligns with the growing emphasis on digital literacy and the integration of critical technological infrastructure in education (Kalahatu, 2021). By leveraging these innovative platforms, educators can make the learning process more engaging, adaptive, and tailored to the needs of individual students, ultimately fostering a deeper connection to the material and encouraging lifelong learning.

This problem can be overcome by choosing evaluation tools that are fun and not boring for students, one of which is using a website-based interactive evaluation application (Nizaruddin et al., 2021). The definition of learning evaluation is often interpreted the same as an exam, but learning evaluation is not as simple as being interpreted only as an exam, learning evaluation has a broader understanding than being interpreted as a test alone, namely all activities passed in teaching and learning activities (Sodikin & Gumiandari, 2021). Assessment or measurement of students' ability to determine the level of ability or understanding acquired by students during the educational process is another definition of evaluation (Muzaini, Najib, et al., 2023; Wibowo et al., 2022). Furthermore, another understanding of evaluation is a tool used to weigh and determine the value and meaning of something that can be in the form of people, objects, activities, circumstances or a certain unity based on a set of criteria that have been agreed and can be accounted for (Fitrah & Ruslan, 2021). Evaluation is an action or procedure to determine the value of a person's (student) learning success after following the learning process if the notion of evaluation is associated with "learning outcomes" (Muzaini, Rahayu, et al., 2023; Tabrani et al., 2021). The selection of learning evaluation tools that students like and will not make them bored is the authority of the teacher, such as the use of website-based educational games. One website that can be used as a fun evaluation tool is wordwall (Rosydiyah et al., 2022).

The word game in English is interpreted as a game or match. Games are structured or semi-structured activities that are usually played for fun but can also be used for learning (Nissa & Renoningtyas, 2021). Education is the provision of knowledge about certain things as an effort to increase people's understanding, while educational games are games designed to improve education (support education) (Arsini et al., 2022). Wordwall is a website-based educational game that has provided various game and quiz features that teachers can use to evaluate learning. Visual Education Ltd is a English company that has launched and developed wordwall educational games. (Jannah & Syafryadin, 2022) Wordwall is designed to make it easier for educators to create educational game-based online learning evaluation tools and customize the content to be taught, accessible anytime, by anyone, and free to use (Darmayanti & Rahayu, 2023). Through this wordwall platform, teachers are greatly helped in creating an atmosphere for conducting evaluations that will be welcomed by students because wordwall is easy to use and looks attractive, wordwall also has many choices of templates provided, for basic and unpaid options, wordwall is paid if you want to get more templates and game features (Matt et al., 2022). Once the wordwall game is finished, the author (teacher) can send a direct link to Google Classroom, WhatsApp, and other platforms. Wordwall games provide several templates namely crossword puzzles, quizzes, random cards, and various other types. However, wordwall requires a good and strong internet network connection (Maindoka et al., 2022).

Research on the use of digital wordwall games has been carried out by many previous researchers. One of them is a study conducted by Siti Faizatun Nissa and Novida Renoningtyas entitled "The Use of Wordwall Learning Media to Increase Student Interest and Motivation in Thematic Learning in Elementary Schools" which states that the use of wordwall media in class II thematic learning can increase student interest and motivation to learn (Pradani, 2022). Another study conducted by Yunita Margareta Sinaga and Robert Harry Soesanto entitled "Efforts to Build Discipline through Wordwall Learning Media in Online Learning for Elementary School Students" states that student behavior is affected when wordwall media is used. In order to form good habits that ultimately form a disciplined character, students become more organized and accustomed to following the rules, taking responsibility for God's command to regulate everything, including technology, is shown by using wordwall media. Therefore, researchers hope that wordwall media can be maximally utilized because of the availability of interesting features for free (Sinaga & Soesanto, 2022). The use of wordwall can increase students' learning motivation reinforced by research conducted by Prisma Gandasari and Puri Pramudiani entitled "The Effect of Wordwall Application on Students' Science Learning Motivation in Elementary Schools" found that wordwall application has an influence on the learning motivation of grade V students at SDN Bojong Rawalumbu VI (Gandasari & Pramudiani, 2021).

From previous studies, it can be concluded that the use of wordwall is practical and effective as a learning media. The difference with this research is that it discusses how the benefits of wordwall educational games as a learning evaluation tool. Previous studies used a lot of qualitative research methods to measure the influence and effectiveness of wordwall applications, in contrast to this research, this research has a novelty where this research explores in depth using a qualitative approach so that the data obtained is real based on the point of view of the object of research. The purpose of this research is to reveal how the benefits of wordwall educational games as a thematic learning evaluation tool for elementary school students.

RESEARCH METHODS

This research employs a qualitative approach, utilizing descriptive analysis methods (Sugianto et al., 2014). The chosen method is well-suited for the study as it allows the researcher to thoroughly explore and describe the benefits of using educational games, particularly Wordwall, as an evaluation tool in elementary schools. The study was conducted at an elementary school in Bandar Lampung during the odd semester of the 2022/2023 academic year. The primary informants in this research were the teachers, specifically homeroom teachers for Grade V (five). To gather data, the study employed several techniques, with interviews serving as the primary tool to extract detailed information regarding the use of educational games in the form of Wordwall. Interviews allowed the researchers to explore teachers' perceptions, experiences, and insights about incorporating Wordwall as an evaluation tool in the classroom.

The data analysis in this study followed the Miles and Huberman analysis technique, a systematic method that includes three stages: data condensation, data presentation, and conclusion drawing (Miles et al., 2014). Additionally, to ensure the credibility and accuracy of the findings, a triangulation method was used for data validation. This included both source triangulation and time triangulation. By utilizing multiple sources of data and gathering information at different times, the researchers aimed to enhance the validity and reliability of the results, ensuring that the data presented is credible, accurate, and precise. In the first stage, data condensation, all the collected data from the field, including interviews, observations, and documentation, were summarized, recorded, and categorized. Researchers then condensed the data by filtering and selecting only the relevant information, organizing it into specific concepts and themes that align with the research objectives. This step is crucial in making sense of the vast amounts of data collected and focusing on key aspects that inform the study's conclusions. Next, the data presentation stage involved organizing and presenting the condensed data in a descriptive format, which provided a clear narrative of the findings. Descriptive data allows the researcher to illustrate patterns, relationships, and insights that emerged from the field data in a coherent manner. The presentation of data plays a vital role in ensuring that the findings are accessible and interpretable.
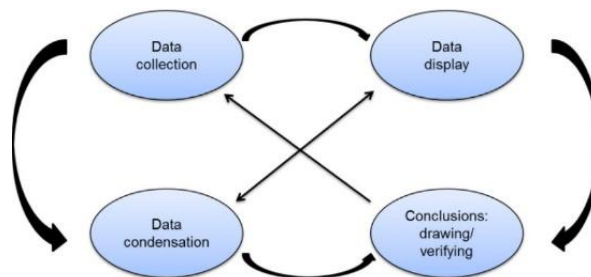

Figure 1. Analisis Data Miles and Huberman

Finally, the study concludes with the conclusion drawing stage, where researchers draw inferences based on the data analysis. The conclusions drawn represent new findings that were previously unknown before the research was conducted. These findings emerged throughout the research process as the data was continuously analyzed and interpreted. The conclusions provide insights into the benefits and challenges of using educational games like Wordwall in elementary

education, contributing valuable information to the field of educational evaluation. The overall data analysis process can be summarized in the following chart, which outlines the step-by-step approach from data collection to conclusion: (here, you may insert or refer to a specific chart that visualizes the Miles and Huberman analysis stages). By following these systematic methods of data analysis and validation, the research aims to provide a credible, accurate, and well-rounded understanding of how Wordwall as an educational game can be effectively used as an evaluation tool in elementary schools. The findings contribute to the broader discourse on educational technology, offering practical implications for teachers and schools seeking to innovate in the way they assess and engage students.

RESULTS AND DISCUSSION
Use of Wordwall Educational Game as an Evaluation Tool in Elementary School
The data presented in this discussion are the results of interviews with Mrs. NA, a fifth grade teacher at one of the elementary schools in Bandar Lampung regarding evaluation tools in the form of a web-based game, namely wordwall. The use of the wordwall application is carried out when carrying out evaluations after the material is given to students. This evaluation is carried out to see the extent of student understanding related to the material that has been taught. However, if the process of implementing learning evaluations is only carried out in a monotonous conventional way, it will make students bored, so there is a need for reform in the implementation of learning evaluations. The worwall application has positive benefits to be used as a learning evaluation tool. In accordance with the explanation given by the class teacher**:**

"...During the pandemic, I used several educational games for online learning, including Wordwall. Wordwall is ideal for evaluations both online and offline due to its ease of use and pre-made templates. This tool allows me to quickly create evaluation questions aligned with the material. The game format keeps students engaged and enthusiastic. Immediate scoring provides instant feedback on their understanding, and the interactive nature of the game makes learning fun and engaging. ".

The results of the interviews show that the use of Wordwall educational games as an evaluation tool in elementary schools has significant positive benefits. Teachers report that Wordwall not only makes the evaluation process more engaging for students but also offers a practical and creative platform for developing diverse and non-monotonous evaluation activities. The variety of templates and features available in Wordwall allows for flexibility in crafting evaluation tools that are fun, interactive, and tailored to different learning objectives. Additionally, the immediate feedback provided by the system, with scores displayed as soon as the student finishes the activity, makes the evaluation process more efficient and practical.

The use of Wordwall as an evaluation tool in elementary education offers numerous advantages, but a deeper analysis reveals its broader implications through theoretical frameworks such as Constructivist Learning Theory, Self-Determination Theory (SDT), and the concept of Gamification in Education. Constructivist learning theory, as developed by Jean Piaget and Lev Vygotsky, emphasizes the active role of learners in constructing knowledge through interaction with their environment (Piaget, 1952; Vygotsky, 1978). Wordwall aligns with this theory by encouraging students to engage actively in the learning and evaluation process, transforming passive learning into dynamic problem-solving and immediate feedback opportunities. This active engagement promotes a deeper understanding of concepts and helps students retain knowledge by applying it in a meaningful context. Furthermore, the platform's customization options allow teachers to tailor evaluations to the specific needs of their students, supporting the constructivist idea that learning is most effective when personalized (Bruner, 1996).

Self-Determination Theory, introduced by Deci and Ryan (1985), posits that motivation is driven by three key psychological needs: autonomy, competence, and relatedness. Wordwall taps into these motivational factors effectively. The platform gives students autonomy by allowing them to control their learning and evaluation process, fostering intrinsic motivation. The instant feedback provided by Wordwall helps students gauge their competence, motivating them to improve their

performance (Ryan & Deci, 2000). Moreover, the platform can promote relatedness by enabling collaborative learning experiences, where students can work together and engage in peer learning, thus enhancing social bonds and motivation (Deci et al., 1991). This is further supported by findings from Amry et al., (2024), who demonstrated that Wordwall significantly increases students' motivation in science learning.

The concept of Gamification, which involves applying game-like elements in non-game contexts, has proven to be a valuable strategy in education. Research by Hamari et al. (2016) shows that gamified learning environments can enhance both student motivation and academic performance by incorporating elements such as point scoring, competition, and instant feedback. In the case of Wordwall, the gamification aspects help make evaluation more engaging compared to traditional written tests, stimulating students' enthusiasm and creating a sense of accomplishment through immediate feedback. This aligns with studies showing that gamification in education fosters higher levels of engagement and better learning outcomes (Deterding et al., 2011). However, despite these benefits, it is essential to consider the challenges and limitations of using Wordwall. Over-reliance on gamified tools may shift the focus from deep learning objectives to surface-level engagement, where the emphasis is more on competition and scoring rather than understanding (Nicholson, 2015). Educators must balance the use of these tools with meaningful pedagogical strategies to ensure that students are genuinely learning, not just playing. Furthermore, research by Benson and Brack (2010) indicates that not all students benefit equally from game-based learning; some students prefer traditional assessment methods. Therefore, teachers must incorporate a variety of evaluation strategies to cater to different learning preferences and ensure inclusivity in the classroom.

Finally, the teacher's role remains crucial in the successful integration of Wordwall into the curriculum. While the platform offers numerous features, the effectiveness of these tools depends on the teacher's ability to align evaluations with learning objectives, design challenges that are appropriate for the students, and provide constructive feedback. Without thoughtful and deliberate implementation, the educational benefits of gamified tools like Wordwall may not be fully realized (Reeves & Read, 2009). In conclusion, Wordwall offers considerable potential as an evaluation tool in elementary education, promoting student engagement, providing immediate feedback, and encouraging creative assessment design. Supported by theories of constructivism, self-determination, and gamification, Wordwall demonstrates its ability to positively impact student motivation and learning outcomes. However, a critical and reflective approach is necessary to ensure that these tools are used effectively, considering the diverse needs of students and the essential role of educators in guiding meaningful learning experiences.

Use of Wordwall Educational Game as a Thematic Learning Evaluation Tool

The steps to use Wordwall are as follows: 1) Create an account on the Wordwall website, 2) Click "create activity" and enter the title and questions, 3) Select a template, and 4) Click "publish." Based on research findings, an example of Wordwall's use in evaluating thematic learning for 5th-grade students on the topic "Healthy Food" involved the teacher preparing both online and offline materials. In online learning, the teacher began with a greeting and instructions, then shared the Wordwall link for students to access and complete the evaluation. Students received immediate feedback on their answers, and the teacher could monitor scores and completion times via the "my results" feature. In offline settings, the process was similar, with students directed to the computer lab to complete the activity. The research found that students were enthusiastic and active during evaluations, though this sometimes led to increased classroom noise, requiring more attention from the teacher. The findings align with research by Rahma et al., (2023), which suggests that Wordwall applications make learning more engaging, efficient, and in line with educational objectives.

Moreover, the customization features of Wordwall allow teachers to tailor their assessments according to the learning needs and preferences of their students. This flexibility can help make the learning process more inclusive, catering to different learning styles. The variety of templates ensures that the evaluation process is not monotonous, encouraging creativity in the way teachers assess

students' understanding. In both online and offline settings, students seem to respond positively, becoming more enthusiastic and engaged with the material. This is supported by findings from constructivist learning theories, which argue that active participation and engagement with learning materials lead to deeper understanding (Vygotsky, 1978; Cole et al., 1978; Phillips, 2014).

The use of Wordwall as an evaluation tool in education offers a range of benefits, as shown in the research findings. It provides teachers with a step-by-step process for creating interactive assessments, making it easier for students to engage with the material in both online and offline learning environments. One of the main strengths of Wordwall is its ability to engage students actively during evaluations, offering immediate feedback that helps correct misunderstandings in real time, which can improve retention and motivation. This aligns with research indicating that gamified learning environments, such as Wordwall, can make the learning process more active, efficient, and enjoyable for students (Az Zahrah & Anwar, 2023; Purwanti et al., 2024). The tool's flexibility also allows teachers to customize assessments based on the needs of their students, making the evaluation process less monotonous and more creative. However, despite these advantages, there are some critical challenges to consider. One potential issue is that an over-reliance on digital tools like Wordwall could shift the focus away from deeper learning objectives. There is a risk that students may prioritize achieving high scores over truly understanding the material. As noted by Nicholson (2015), gamification can sometimes result in superficial learning if not carefully integrated into a broader educational framework. Additionally, managing student behavior during these interactive assessments, especially in offline settings, can be challenging. The excitement generated by the game-like format can make the classroom environment more energetic, which may require additional supervision from teachers to maintain order and focus on learning (Jones & Jones, 2012).

Another important consideration is equity in access to technology. While Wordwall can be highly effective in well-resourced schools, students in underfunded institutions may struggle to access the necessary technology, creating a digital divide that can negatively impact learning outcomes. Research highlights the importance of ensuring all students have equal access to digital tools, and teachers must be mindful of providing additional support to students who are less familiar with such platforms (Benson & Brack, 2010). Finally, the pedagogical implications of using Wordwall must be carefully evaluated. While the platform makes assessments more engaging, it is crucial that these evaluations encourage higher-order thinking, such as analysis and critical reasoning, rather than simply testing rote memorization (Bloom, 1956). In conclusion, while Wordwall offers significant benefits, such as increased student engagement, immediate feedback, and creative assessment design, it is essential for educators to use it thoughtfully. Balancing its use with other evaluation methods, managing classroom dynamics, and ensuring equitable access to technology will allow teachers to maximize the potential of Wordwall as part of a comprehensive assessment strategy. When used effectively, Wordwall can contribute to deeper learning and foster student success in a variety of educational contexts.

Implications of Wordall App on Students

The research findings clearly suggest that the Wordwall application has significant implications for improving student engagement and learning outcomes, particularly by addressing the common issue of boredom in the classroom. The interactive nature of Wordwall allows students to "play while learning," which fosters a more engaging and stimulating educational environment. This idea is strongly supported by Putri & Suyitno (2023), who found that gamified learning tools like Wordwall can enhance student motivation and interest in the learning process. The class teacher in the study observed that students' responses improved notably after the introduction of Wordwall, and this was further evidenced by enhanced learning outcomes. This demonstrates the potential of Wordwall as an effective tool in elementary education, where maintaining student attention and enthusiasm is crucial for academic success (Benson & Brack, 2010).

In addition to addressing boredom, the research highlights that Wordwall introduces a new learning experience for students, transforming traditional evaluation and teaching methods. The

novelty of this approach was met with positive reactions from students, which, according to the class teacher, led to a more engaging and interactive learning environment. This type of engagement is critical for fostering long-term memory retention. Research in cognitive psychology, such as studies by Mayer (2002) and Baddeley (1997; Ikkos, 2000), supports the idea that active, enjoyable learning experiences are more likely to be encoded into long-term memory. When students engage with the material in an interactive way, they are not just passively absorbing information but actively constructing knowledge, which increases the likelihood of retention over time. This is crucial, as the long-term retention of knowledge ensures that the learning taught in class is not quickly forgotten, enabling students to recall and apply the information in future contexts.

Furthermore, the Wordwall application aligns with the principles of constructivist learning theory (Piaget, 1952; Vygotsky, 1978), which emphasizes the importance of active participation and hands-on learning in the construction of knowledge. By providing students with immediate feedback on their performance, Wordwall allows for formative assessments that help students identify and correct their mistakes in real time. This promotes a continuous learning cycle where students can improve their understanding progressively, an approach that is supported by Black & Wiliam (1998), who advocate for the importance of formative assessments in improving learning outcomes. The flexibility of Wordwall as a teaching tool is another significant advantage highlighted by the research. Teachers can customize their activities and assessments to align with specific learning objectives and the needs of individual students. This adaptability is essential in differentiated instruction, where lessons are tailored to accommodate varying abilities and learning styles. According to Tomlinson (2001), differentiated instruction is key to meeting the diverse needs of students, and tools like Wordwall provide educators with the resources needed to personalize learning experiences effectively. The platform's diverse templates and activity types allow teachers to design creative and engaging tasks that are aligned with curriculum goals, thus enhancing the relevance and effectiveness of classroom instruction.

Moreover, the immediate feedback provided by Wordwall plays a crucial role in fostering a more dynamic and responsive learning environment. Studies by Hattie & Timperley (2007) show that immediate feedback is one of the most powerful influences on student achievement, as it helps students understand their performance and make adjustments in real-time. Wordwall's ability to provide instant results allows students to see their mistakes and learn from them immediately, rather than waiting for delayed feedback, as is often the case with traditional assessments. This not only enhances learning efficiency but also boosts student confidence, as they can monitor their progress and improvement more closely. In addition to improving student engagement and learning outcomes, Wordwall can also foster collaborative learning. As students engage with the platform in group activities or competitive formats, they develop teamwork and communication skills. Research by Johnson & Johnson (1999) emphasizes the importance of cooperative learning in enhancing academic achievement and social skills. Wordwall's gamified structure can be adapted for group activities, making it a versatile tool for promoting both individual and collective learning.

While the benefits of Wordwall are clear, it is also important to recognize that challenges exist. Over-reliance on gamified tools like Wordwall may, in some cases, lead to superficial learning, where students focus more on competition and scores than on developing deep understanding (Nicholson, 2015). Educators must carefully integrate these tools into the broader pedagogical framework to ensure that they support—not replace—critical thinking and problem-solving skills. Furthermore, ensuring equitable access to technology is critical. Studies by Benson and Brack (2010) highlight that digital tools must be accessible to all students, particularly in under-resourced schools, to prevent widening the gap between students with access to technology and those without.

In conclusion, the use of Wordwall as an educational tool has significant positive implications for student engagement, motivation, and long-term memory retention. The platform provides an innovative and flexible approach to learning that aligns with contemporary educational theories, such as constructivist learning and differentiated instruction. Its ability to provide immediate feedback and foster collaborative learning makes it a powerful tool for enhancing the overall learning experience.

However, educators must be mindful of potential challenges, including ensuring that its use is balanced with other pedagogical strategies and that all students have equitable access to the technology. When used thoughtfully, Wordwall can be a highly effective resource for promoting deeper learning and supporting student success in both the short and long term.

CONCULTION

Interactive Wordwall games are used in third-grade thematic lessons, such as healthy food, to evaluate students' understanding of the material. These games offer several benefits as evaluation tools in elementary schools, making it easy for teachers to create fun, game-based assessments that boost student enthusiasm and engagement. Wordwall also minimizes paper use and can be applied across various subjects. However, its drawbacks include the need for an internet connection, limited customization of font size and type, and paid access to additional templates. Future research is recommended to explore these limitations and optimize the use of Wordwall in schools.

The use of Wordwall in learning evaluation reinforces technology-based learning as a 21st-century innovation, aligning with constructivism and interactive learning theories by promoting active student engagement. It also contributes to research on technology's role in enhancing motivation and learning outcomes. Practically, Wordwall serves as an effective, paper-saving assessment tool in elementary schools, though challenges like internet access and subscription costs need to be addressed. Schools should ensure proper infrastructure and teacher training to maximize its potential.

For further research, it is recommended that researchers explore the effectiveness of Wordwall more deeply at different levels of education and subjects to measure its impact on student learning outcomes more broadly. In addition, research can focus on developing more flexible Wordwall features, such as setting font types and sizes and reducing dependence on internet connections. Comparative studies between Wordwall and other digital assessment platforms will also provide deeper insights into the strengths and weaknesses of each. Research involving teacher and student perspectives on the experience of using Wordwall can also be an essential area for further study.

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