

Utilization of wordwall as an application for elementary school thematic learning evaluation

Ani Khoiratun Nisa^{1*}, Noptario², M. Choirul Muzaini³

^{1,2&3}Universitas Islam Negeri Sunan Kalijaga Yogyakarta, Indonesia

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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. The contribution of this study shows that the use of Wordwall can serve as an innovative alternative in learning assessment, particularly in science subjects. Wordwall not only increases student engagement and motivation but also helps teachers provide creative assessments and immediate feedback, thereby supporting a more interactive and meaningful learning process.



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INTRODUCTION

Learning saturation is a frequent issue in classrooms, often resulting from repetitive teaching styles, limited innovation, and ineffective educator-student communication (Hasram et al., 2021; Salarvand et al., 2023; Ashipala & Matundu, 2023). This stagnation in learning can lead to reduced motivation and disengagement. To cultivate an engaging and interactive learning environment, it is crucial to implement strategies that boost student participation and interest. A key approach involves selecting effective learning assessment platforms (Filgona et al., 2020; Noptario & Prastowo, 2022; Bönke et al., 2024). Traditional assessment methods, such as multiple-choice and essay tests, remain widely used (Buchwald & Schwarzer, 2010; Aqmarani et al., 2021) but often fail to evaluate creativity and critical thinking comprehensively. In contrast, digital tools introduce interactive and gamified assessments, enhancing student engagement (Smiderle et al., 2020; Dor & Shmuel-Nir, 2023; Hellín et al., 2023). With students increasingly relying on technology, integrating digital platforms aligns with the emphasis on digital literacy and modern educational infrastructure (Kalahatu, 2021; Yeni et al., 2023). Utilizing these tools makes learning more personalized, adaptive, and enjoyable, fostering stronger connections to the material and promoting lifelong learning.

Based on various preliminary studies, learning evaluation is often considered identical to exams, even though it has a broader scope (Schellekens et al., 2021; Du & Lundberg, 2021). Sodikin and Gumiandari (2021) and Murphy et al. (2023) explain that evaluation includes various activities in the teaching and learning process, not just tests. Furthermore, according to Muzaini et al. (2023) and Wibowo et al. (2022), evaluation functions as a tool to measure the level of students' understanding of the material studied. Meanwhile, Fitrah and Ruslan (2021) state that evaluation also plays a role in assessing and determining the value of an aspect of education based on predetermined criteria. About learning outcomes, Muzaini et al. (2023) and Tabrani et al. (2021) define evaluation as a procedure used to assess the level of student success in the learning process. To avoid boredom and increase evaluation effectiveness, interactive and engaging evaluation tools, such as web-based applications in the form of educational games, are recommended (Vlachopoulos & Makri, 2017; Nadeem et al., 2023). One application that supports this concept is Wordwall, which, according to research by Rosydiyah et al. (2022), has been proven to be an innovative and fun evaluation tool for students. This study is novel compared to previous studies, which generally use qualitative methods to measure the effectiveness of Wordwall. Unlike the others, this study explores the use of Wordwall with a qualitative approach so that the data obtained is more accurate and based on the direct perspective of the research object.

This study aimed to analyze the use of the Wordwall application in learning, especially in increasing student engagement and understanding. This study also evaluates the effectiveness of Wordwall as an interactive and engaging learning media for students. In addition, this study discusses the impact of using Wordwall on the learning process, both in terms of increasing learning motivation, ease of evaluation, and challenges faced in its implementation. Meanwhile, the benefits of this study are expected to contribute to various parties in the world of education. For teachers, this study can be a reference in choosing and implementing interactive and engaging learning media, such as Wordwall, to increase student engagement and understanding. Wordwall can provide students with a more enjoyable learning experience, increase motivation, and help them understand the material more effectively. In addition, this study is helpful for educational technology developers by providing insight into the effectiveness of the Wordwall application in the learning process so that it can be further developed according to educational needs. Academically, the results of this study can be the basis for further research that wants to explore more deeply the impact of using digital learning media on student learning outcomes.

Based on the objectives and benefits of the study, the hypothesis proposed in this study is that using the Wordwall application in learning can increase student engagement, motivation, and understanding of the material being taught. Wordwall, as an interactive learning media, is likely to create a more interesting and enjoyable learning environment so that students are more active in participating in learning. In addition, Wordwall makes it easier for teachers to evaluate learning by

providing direct feedback that helps students understand their mistakes and improve their understanding of concepts in greater depth. However, implementing Wordwall is also predicted to have challenges, such as dependence on internet connections and teacher readiness to integrate this technology into learning. Therefore, this study will test the extent to which Wordwall is efficacious in improving the quality of learning and identifying factors that can influence its success in education.

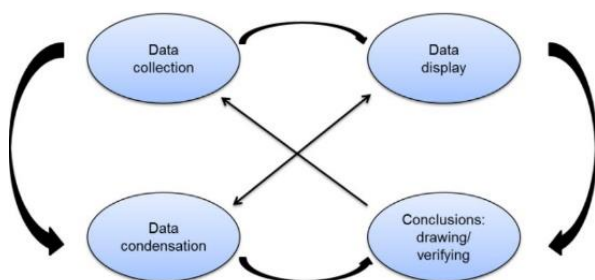
RESEARCH METHOD

This study uses a qualitative approach with a descriptive analysis method (Nassaji, 2015; Hall & Liebenberg, 2024). This approach was chosen because it allows researchers to explore and describe the benefits of using educational games, especially Wordwall, as an evaluation tool in elementary schools. This study was conducted in an elementary school in Bandar Lampung. The primary informants in this study were teachers, especially the homeroom teachers of grade V (five). To obtain data, this study applied various data collection techniques, with interviews as the primary method (Colorafi & Evans, 2016). Interviews were used to explore detailed information regarding implementing Wordwall-based educational games in the evaluation process. Through interviews, researchers can better understand teachers' perceptions, experiences, and views on the effectiveness of 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

Results

Use of wordwall applications in learning evaluationg

In the era of digital learning, the Wordwall application has become a revolutionary tool for teachers, such as Ms. NA, who use it to improve classroom interaction and evaluation. According to Ms. NA, this application makes creating compelling and engaging evaluations easy. The following are the findings based on interviews with class teachers:

Table 1

Use of Wordwalls in Learning

No	Finding Points	Description
1	Using Wordwalls During the Pandemic	Ms. NA uses Wordwall as part of her online learning strategy to keep students engaged during the COVID-19 pandemic.
2	Ease of Use	Wordwall was chosen because of its ease of use and the availability of pre-made templates, which allow for quick and effective creation of evaluation questions.
3	Ideal for Online and Offline Evaluation	This application is considered ideal for use in both online and offline learning situations.
4	Increasing Student Engagement	The game format in Wordwall helps keep students engaged and increases their enthusiasm for learning.
5	Making Learning Fun and Interesting	The interactive nature of the application makes the learning process more fun and interesting for students, overcoming the boredom and monotony of conventional learning evaluations.

Note: The data were obtained from interviews with the classroom teacher

These findings reveal that using Wordwall in learning shows a significant adaptation of technology in the educational context. However, these findings do not fully explain the challenges that teachers and students may face in its implementation, such as limited access to technology or digital skills of students and teachers. In addition, although Wordwall is effective in increasing engagement, it is also necessary to consider how this application affects students' long-term learning outcomes. Therefore, it is important to conduct further research on the impact of Wordwall use on the achievement of learning competencies.

Wordwall application as an interactive and interesting evaluation tool

When integrating Wordwall into the curriculum, teachers start by creating an account and designing customized activities, allowing learning to be more interactive and engaging. This process facilitates more effective teaching and enriches the student experience by providing instant feedback and increasing their engagement through a game-based approach. The following are points from the interview results:

Table 2

Wordwall Application as an Interesting Evaluation Tool

No	Finding Point	Description
1	Procedure for Using Wordwall	To use Wordwall, register and create an account on the site, then create an activity with a title and questions as needed. Choose the right template and publish the activity for students to access. This facilitates the efficient creation of interactive learning materials.

2	Implementation of Wordwall in Online and Offline Learning	In online learning, the teacher begins by greeting and giving instructions, then provides a Wordwall link for the assessment. In face-to-face sessions, students use the computer lab to complete the assessment via the Wordwall.
3	Feedback and Monitoring	Students get immediate feedback on their answers via Wordwall. Meanwhile, teachers have the ability to monitor students' scores and the time it takes to complete an assignment using the "my results" feature in Wordwall.
4	Student Engagement Level	Students showed high enthusiasm and activity during the evaluation process using Wordwall.
5	Class Management	Increased noise in the classroom during the Wordwall evaluation, requires more attention from the teacher to manage the classroom effectively.

Note: The data were obtained from interviews with the classroom teacher

The Wordwall application's use as an evaluation tool has shown its effectiveness in creating interactive learning materials that can be accessed online and offline, as well as providing real-time feedback and monitoring that helps assess learning progress. However, despite increasing student engagement, this application also presents challenges in managing noise in the classroom. Therefore, using Wordwall requires careful classroom management strategies to optimize its usefulness without disrupting the learning process.

The impact of using wordwall applications in learning

Using Wordwalls in educational contexts has significantly transformed how students learn and teachers teach. Integrating this technology into the curriculum makes the learning process more interactive and engaging, increasing student engagement and learning outcomes. Wordwalls support constructive learning through effective immediate feedback and enable flexible teaching and collaborative learning, strengthening student independence and confidence. Here are the findings:

Table 3

Implications of Using Wordwalls in Learning

No	Finding Point	Description
1	Improving Engagement and Learning Outcomes	Wordwalls increase students' motivation and interest in learning by making the learning process more interactive and enjoyable.
2	Constructive Learning Support	This app supports constructivist learning theory by providing immediate feedback that helps students correct mistakes and understand the material more effectively.
3	Flexibility in Teaching	Wordwalls allow teachers to customize materials and assessments to individual learning needs, supporting differentiated instruction.
4	Collaborative Learning and Feedback	This platform facilitates collaborative learning and provides instant feedback, which increases students' confidence and independence in learning.

Note: The data were obtained from interviews with the classroom teacher

Wordwalls in education offer benefits such as increasing student engagement and supporting constructive learning through immediate feedback. However, this increased engagement may focus more on gameplay than a deeper understanding of the material. While providing flexibility in teaching and facilitating collaborative learning, using Wordwalls requires careful teacher supervision to ensure that the technology supports reflective learning and the development of students' critical skills. Therefore, the integration of Wordwalls into the curriculum must be done strategically to maximize their educational benefits while avoiding potential over-reliance on digital tools.

Discussion

Transformation of learning evaluation: From conventional to interactive with wordwall

Using the Wordwall application in learning evaluation in an elementary school in Bandar Lampung has significantly transformed from conventional to interactive evaluation methods. In an interview with Mrs. NA, a fifth-grade teacher, she described how Wordwall helped make the evaluation process more engaging and effective. The application offers various templates that allow teachers to quickly adjust evaluation questions to the material taught, while the game format keeps students engaged and excited about learning. Wordwall's live assessment feature provides instant

feedback to students, increasing interaction in the learning process and efficiency in assessment. This transformation results in a more dynamic approach to learning evaluation, replacing the old monotonous approach with a more interactive and fun experience for students.

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 enable teachers to design assessments that align with students' diverse learning needs and preferences. This flexibility fosters inclusivity by accommodating different learning styles and preventing monotony in the evaluation process. The availability of varied templates also encourages teacher creativity in assessing students' understanding. In practice, both online and offline classrooms demonstrate positive student responses, as learners become more enthusiastic and engaged with the material. Vygotsky (1978) emphasized that active engagement within social contexts promotes deeper learning, while Cole et al. (1978) argued that cultural tools, such as digital media, play a vital role in shaping students' knowledge construction. Complementing these views, Phillips (2014) highlighted the importance of interaction with content for meaningful understanding. Together, these perspectives affirm that Wordwall effectively integrates constructivist principles to enhance participation, creativity, and comprehension in learning.

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.

Wordwall is an educational tool that encompasses clear steps for implementation, identifiable benefits, relevant pedagogical considerations, and practical challenges. While its structure is well designed, the connections between implementation steps and their benefits often lack sufficient elaboration. The platform has strong potential to enhance student engagement by integrating gamification features and providing immediate feedback, yet it must be carefully adapted to suit individual learner needs and align with local curriculum standards. Teachers should also anticipate potential challenges, such as classroom management issues and unequal access to technology, which require appropriate training and mitigation strategies. By adopting an integrated and context-sensitive approach, Wordwall can serve as a powerful tool to support interactive learning, promote inclusivity, and foster students' critical and creative thinking skills, ultimately enriching the overall assessment process.

Optimizing Learning with Wordwalls: Increasing Engagement and Overcoming Challenges

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.

CONCLUSION

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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