

# Exploring The Use of Technology in Teaching Vocabulary in Junior High Schools

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## ABSTRACT:

*This study explores the use of technology in language teaching in junior high schools, emphasizing its effects on student involvement and academic achievement. The study was carried out at two schools located in Kecamatan Gunuang Omeh, with four teachers participating. Data were gathered by classroom observations and interviews to comprehend the implementation and results of technology-enhanced educational methods. The results indicated that the integration of technology markedly enhanced student engagement and academic performance. Interactive platforms such as Wordwall and Kahoot! offered stimulating activities and competitive games that encouraged students to engage actively in vocabulary development. The Quizlet flashcard technique also assisted students by improving their capacity to memorize vocabulary efficiently. Teachers exhibited creative approaches in incorporating these technologies into their pedagogical practices, resulting in a more engaging and effective vocabulary acquisition experience. This study highlights the transformative capacity of technology in vocabulary teaching. Nonetheless, it highlights the importance for sufficient infrastructural support and extensive teacher training for successfully using the benefits of technology in educational environments. These processes are crucial for ensuring the efficient utilization of technology tools to improve the quality of teaching and learning in educational settings.*

**KEYWORDS:** Junior High School, Kahoot!, ICT in Education, Technology, Vocabulary, Wordwall, Quizlet.

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## INTRODUCTION

Vocabulary refers to the collection of words that a person has learnt and uses in a language. The process of learning English for those who live in nations where it is not the primary language is known as English as a Foreign Language [1]. It is not utilized as a language of instruction in schools; instead, it is learnt as a second or supplemental language. To give students the ability to communicate effectively in English, English language instruction is frequently offered in official educational settings including language schools, colleges, and universities [2].

Learning a language is often thought of as the ability to create good sentences when speaking and writing. Many people think their main goal is to be able to speak fluently and interact in the language they are learning [3]. However, people often do not realize that the more important thing to learn is the vocabulary

of the language. Having an extensive vocabulary is very important because it is the key to constructing sentences and speaking fluently. Vocabulary is also the main basis in learning a foreign language [4]. Learning vocabulary is a fundamental aspect of mastering a foreign language, as the significance of new words is frequently highlighted in both books and classroom [5].

Vocabulary is every term that is used or known in each language [6]. [7] assert that mastering vocabulary is essential to language acquisition since it forms the cornerstone of speaking, listening, reading, and writing abilities. Conversely, vocabulary is a list of terms that users of a language use in every language, according to [8]. A list or a collection of words might be considered vocabulary. According to this definition, vocabulary consists of all the words that individuals know and use in a language. The most crucial component of acquiring sentence structure and other language abilities is expanding one's vocabulary.

The application of technology in education significantly aids teachers in enhancing students' capabilities. Technology in education has been shown to enhance student learning outcomes, particularly in the development of cognitive and critical thinking skills [9]. Moreover, technology enhances the accessibility, flexibility, efficacy, and engagement of learning [10]. Technology utilization fosters greater innovation among students in their learning processes [11].

The integration of technology in vocabulary instruction provides novel strategies to address diverse obstacles in learning [12]. Employing resources such as educational applications, interactive platforms, and gamification features enables educators to enhance student engagement in learning while facilitating enhanced memory and comprehension of language. Technology offers a more engaging approach than conventional approaches, as it encourages students to study in an interactive and enjoyable way. Technology facilitates more efficient independent learning beyond the classroom [13]. Students can utilize this program to learn and practice vocabulary at any time and place, thereby reducing their need on traditional classroom instruction. This method enables students to progress according to their individual speed and requirements, fostering a more customized and focused educational experience. Thus, the incorporation of technology enhances students' motivation to learn and facilitates more effective, adaptable, and sustained vocabulary acquisition [14].

Despite its many benefits, the implementation of technology in language teaching presents several problems. Factors include a lack of facilities, lack technological proficiency among teachers, and technical limitations frequently hinder the efficient integration of technology in schools, particularly in rural areas. In such regions, restricted access to technical gadgets, unreliable internet connectivity, and insufficient training for teachers in utilizing technology are the primary barriers impeding the incorporation of technology in education.

This research analyses the utilization of technology in teaching vocabulary at junior high schools, specifically conducted in two schools in the Kecamatan Gunuang Omeh, Kabupaten Lima Puluh Kota, Sumatera Barat. This study aims to explore the utilization of technology by teachers in vocabulary teaching, the various kinds of technology employed.

## METHODOLOGY

This study used a qualitative descriptive methodology to investigate the application of technology in vocabulary instruction within junior high schools. This method aims to thoroughly comprehend the methods and experiences of educators in employing technology as a tool for vocabulary instruction. [15] defines a qualitative descriptive approach as a research methodology that gathers data in the form of words and images rather than numerical values. These data can be acquired from interviews, field notes, photographs, videotapes, personal documentation, notes, memos, and other records.

The research was conducted in two schools located in Kecamatan Gunuang Omeh. The choice of this location was predicated on the fact that both schools have integrated technology into the educational process. The research participants included four English teachers currently employed at each school. The teachers were intentionally chosen to ensure alignment with the study's focus. This study excluded students as participants, therefore concentrating data gathering on the teachers' experiences.

This study utilized classroom observations and semi-structured interviews as instruments. Classroom observations were performed to directly assess the utilization of technology in vocabulary instruction. This observation recorded the tactics employed by educators, the types of technology utilized, and the interaction between educators and technology throughout the learning process. Semi-structured interviews were performed with four educators to provide comprehensive insights into their experiences

with technology use. The interviews encompassed enquiries on the sorts of technology employed, the reasons for selection, the perceived advantages, and the obstacles encountered during deployment.

The data collecting occurred in April-May 2023. The approach commenced with the preparation stage, which involved securing permission from the school to undertake the research. Additionally, classroom observations were performed during English instruction sessions that incorporated technology. After the observations, interviews with educators were undertaken to enhance the information acquired from the observations.

The data collected from observations and interviews were analyzed with theme analysis methods. The analytical process comprises three primary stages: data reduction, data categorization, and conclusion formulation. Data reduction is performed by extracting significant information from the outcomes of observations and interviews. The aggregated data is further categorized into primary categories, including the types of technology employed, the efficacy of technology in vocabulary instruction, and the challenges encountered. This analysis's results are utilized to systematically aggregate research findings.

## RESULT

Interviews and observations conducted with four English instructors across two schools in Kecamatan Gunuang Omeh revealed that all participating teachers utilized technology for vocabulary instruction. This technology was utilized through various programs adapted to the preferences and requirements of each teacher. Among the four teachers interviewed, two utilized Wordwall, one used Kahoot!, and another used Quizlet.

Two teachers utilizing Wordwall stated that this application is highly beneficial for fostering an interactive, enjoyable, and successful learning environment for the teaching of vocabulary. Wordwall enables teachers to design a variety of innovative learning activities, including word matching games, fortunate wheels, crosswords, quizzes, and true or false exercises. These activities can be adjusted to the vocabulary being taught, allowing teachers greater flexibility in structuring instruction to meet student requirements. P1 stated that:

"I really like utilizing Wordwall for teaching vocabulary, because this tool effectively fosters an engaging and enjoyable classroom environment. Wordwall facilitates the imaginative and engaging delivery of vocabulary materials. This application offers several features, like word matching games, riddles, and fortunate wheels, which enhance students' enthusiasm for studying. Furthermore, Wordwall enables me to efficiently generate educational activities adapted to students' needs without consuming excessive time. This enhances the teaching process, rendering it more efficient, effective, and enjoyable for both students and me as a teacher" (P1)

P1's statement was supported by P2, who agreed that Wordwall was highly beneficial for the teaching of vocabulary.

"I use Wordwall as a teaching medium. The user-friendly interface, along with the numerous of readily accessible templates, enables me to efficiently design interesting learning exercises. Students find Wordwall enjoyable for teaching, as it enhances the learning experience through interactivity and engagement. The students' enthusiasm is evident in their engagement with the many games and activities I design in Wordwall. This tool facilitates the creation of an engaging learning environment, while also enhancing my ability to provide vocabulary content efficiently and compellingly." (P2)

It can be concluded that teachers emphasised that Wordwall offers an easily understood and comprehensible interface for both teachers and students. They claimed that the method of generating activities in Wordwall does not necessitate advanced technical abilities, enabling quick creation of educational content with minimal time investment. Wordwall offers many templates enabling educators to create a range of activities, hence maintaining student engagement and preventing boredom. The gamification feature of Wordwall is believed to enhance student involvement in the learning process. The competitive games and activities provided by this program enhance students' enthusiasm for vocabulary acquisition. Students are incentivised to achieve a high score in the game, so enhancing their motivation to comprehend and master the language presented. This also presents an opportunity for teachers to deliver immediate feedback and help students in correcting their errors in a fun way.

Teachers utilising Kahoot! state that the application is an exceptionally excellent medium for teaching vocabulary through a competitive and enjoyable methodology. Kahoot! enables teachers to design game-

based quizzes that students can access directly via their devices, including mobile phones, tablets, or PCs. The teacher highlighted that the competitive aspect, a fundamental characteristic of Kahoot!, might enhance students' drive to learn. Students are motivated to achieve the top scores, resulting in increased focus and improved retention of language during their studies. Kahoot! provides teachers the adaptability to create quizzes according to their educational requirements. Teachers can modify quiz questions to align with the desired terminology and establish an appropriate level of difficulty that corresponds to the students' capabilities. This function facilitates concentrated and stimulating learning for students. P3 stated that:

"I find Kahoot! is very useful for teaching because it enhances the learning experience by making it more enjoyable and participatory. Game-based quizzes enhance students' enthusiasm and motivation for vocabulary acquisition. Kahoot! enables me to evaluate student understanding directly and efficiently" (P3)

Another teacher uses Quizlet as an educational tool for teaching vocabulary. The teacher explained that Quizlet's main function, digital flashcards, significantly aids students in memorising the vocabulary in an easy yet effective way. Utilising flashcards enables students to engage in repetitive study to enhance their retention of new vocabulary. The teacher noted that Quizlet enables students to customise and generate their own flashcards, affording them the flexibility to tailor the content to their comprehension and requirements. Quizlet additionally offers multiple learning modalities that facilitate vocabulary instruction. Writing exercises, games, and assessments enable students to evaluate their comprehension in a more engaging and less tedious manner. These teaching modalities have been modified to accommodate the diverse learning preferences of pupils, including visual, kinaesthetic, and auditory styles. Students can select the learning approach that aligns with their preferences from a range of available.

"I usually use Quizlet for teaching vocabulary due to its numerous beneficial aspects for learning. Digital flashcards, writing activities, and games facilitate an engaging and efficient learning experience for students. Furthermore, I may monitor student progress via the "Class" feature to deliver more suitable feedback." (P4)

The analysis results show that utilizing technology, such as Wordwall, Kahoot!, or Quizlet, can improve the engagement and efficacy of the learning experience for students. These three applications enhance vocabulary acquisition by being adaptable to several student learning methods, including visual, kinesthetic, and auditory styles. Teachers utilizing these tools discover it facilitates the delivery of vocabulary content in an engaging and impactful manner for students. Nonetheless, other technical challenges exist, including inadequate technological infrastructure and unreliable internet connectivity, which may impede the efficacy of technology-based learning. Notwithstanding these limitations, these teachers effectively employ technology in inventive and original manners to enhance the quality of language instruction. This demonstrates the significant potential of technology as an educational support instrument that can mitigate the constraints of conventional teaching methods. To optimize the use of technology in schools, enhanced assistance is required regarding infrastructure and teacher training, enabling more effective utilization of technology.

## DISCUSSION

This study's findings show that employing technology in vocabulary instruction, via applications like Wordwall, Kahoot!, and Quizlet, enhances the efficacy and interactivity of learning in educational settings. These tools enable educators to develop more engaging and adaptable learning experiences, tailored to the varied requirements of students. For instance, Wordwall enables educators to design engaging and competitive learning activities [16]. Kahoot! incorporates gamification features that enhance students' incentive to engage more actively in learning [17]. Conversely, Quizlet offers tools like flashcards and diverse practice modes, proven helpful in aiding students' vocabulary retention and comprehension [18].

Nonetheless, despite the numerous advantages offered by technology, there are obstacles that must be addressed. Infrastructure deficiencies, including insufficient technological gadgets and unreliable internet connectivity, significantly hinder the implementation of technology in specific regions. This may diminish the efficacy of employing technology for vocabulary instruction, particularly in rural regions with little

technological access. The absence of technological proficiency among certain educators may hinder the effective utilization of technology.

## CONCLUSION

This study shows that technology, including applications like Wordwall, Kahoot!, and Quizlet, possesses significant potential to enhance vocabulary instruction at the junior high school level. The utilization of these tools fosters a more engaging, interactive, and efficacious learning experience adapted to diverse student learning styles. Teachers participating in this study indicated that technology facilitates the delivery of vocabulary content in an enjoyable manner and enhances student engagement in the learning process.

Optimal utilization of technology necessitates coordination among schools, government, and educational institutions to furnish sufficient training and resources. With appropriate support, technology can effectively enhance vocabulary acquisition and facilitate the advancement of students' language competencies in the future.

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