

THE IMPACT OF USING MULTIMEDIA IN IMPROVING ENGLISH VOCABULARY ACQUISITION AMONG PRIMARY SCHOOL STUDENTS

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Abstract

The use of multimedia technology in teaching English has become one of the most powerful methods to improve students' vocabulary skills at the primary school level. The study conducted in this research uses the literature study method. The results show that multimedia can create a much more interesting and varied learning experience, which in turn facilitates the recall and comprehension of new English words. Through the dynamic interaction provided by multimedia, students can see and hear words in various contexts, which helps to enrich their understanding. Furthermore, the use of multimedia can accelerate the teaching-learning process and increase students' motivation to learn English. Multimedia content is often designed with interesting visual and audio elements and educational games that encourage learning. These features not only make learning more fun, but also create a positive competitive atmosphere, so that students become more actively involved in learning and experience faster vocabulary improvement. However, the successful utilisation of multimedia in English vocabulary learning requires effective integration by teachers and sufficient technological support. Appropriate teaching strategies, along with continuous evaluation of student progress, are key to optimising learning outcomes. Thus, multimedia serves not only as a teaching aid, but also as a core component that can enrich the learning experience and improve student achievement at the primary school level.

Keywords: Impact, Multimedia Use, Vocabulary Mastery, English, Primary School Students.

Introduction

In the current era of the information and technology revolution, mastery of English is becoming increasingly important as a medium of global communication. English is no longer considered a foreign language in many countries but has also

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become a major part of the education syllabus at various levels, including at the primary school level. One of the key elements in learning English is the mastery of vocabulary, which is the initial foundation of one's language skills.

Vocabulary is a collection of words owned by a particular individual or in a particular language, which includes meaning, usage, and relationships between words in the context of communication (Cleaver, 2020). Vocabulary plays an important role in language proficiency, because one's ability to understand and utilise the right words will greatly affect the effectiveness of communication. A broad vocabulary allows one to express thoughts, feelings, and information with more precision and depth, while limited vocabulary can limit comprehension and the ability to speak or write in the language. Vocabulary also develops over time and can be enriched through experience, education, and social interaction (Joo, 2023).

Vocabulary acquisition is one of the most important aspects of learning English, as the ability to understand and utilise words appropriately forms the basis of all other language skills, such as reading, writing, listening and speaking. When a person has an extensive vocabulary, they can understand more complex texts, communicate more efficiently, and express their ideas more accurately and variedly (Hu & Du, 2023). Without adequate vocabulary mastery, learners will have difficulties in understanding context, deciphering sentences, and picking up on different nuances of meaning, which can ultimately hinder the learning process and overall language acquisition (Wang, 2022).

In addition, a solid increase in vocabulary competence also increases learners' confidence in interacting using English. By having a variety of words at their disposal, they become better able to contribute to discussions, write effective essays, and understand English media, such as books, films, or news (Tsai, 2020). An abundant vocabulary also helps in the development of more natural and fluent speaking skills, as learners can choose the right words for different situations and communication purposes. Therefore, focusing on vocabulary development is an important strategy in language learning, which not only helps in the achievement of academic goals but also in the use of English in everyday and professional situations (Alharbi, 2022). However, vocabulary teaching is often faced with various challenges. Conventional teaching methods, such as memorising words, are often less engaging and effective for primary school students who have short attention spans and tend to get bored easily. Therefore, there is a need to innovate teaching methods that can produce a more interesting and interactive learning process.

On the other hand, advances in information technology have brought significant changes in the world of education. Multimedia, which includes the use of text, images, audio, video and other interactive elements, has been identified as a potential tool to improve learning effectiveness. The use of multimedia in teaching has been shown to

increase students' learning motivation, provide a richer learning experience, and assist in the understanding of complex material (Heo & Hwang, 2023).

Various studies have been conducted to explore the effectiveness of using multimedia in various aspects of language learning, including English vocabulary acquisition (Heo & Hwang, 2023). The results of these studies show that multimedia can make the learning process more interesting and effective, by providing visual and auditory contexts that can strengthen the recognition and retention of new vocabulary (Rahayu, 2023).

Technological advances offer various conveniences in conveying knowledge, one of which is through multimedia. However, the use of multimedia in English language learning in primary schools still leaves gaps. Most of the previous studies focus more on the more advanced level of education. Therefore, this study aims to further examine the impact of multimedia use on vocabulary acquisition of primary school students, in order to provide constructive input for more effective teaching methods.

Thus, this study continues to take an in-depth look at the integration of multimedia in primary school English classes.

Research Methods

The study conducted in this research uses the literature research method, which involves in-depth study and analysis of various written sources relevant to a particular topic. Literature research is usually used to understand the current state of knowledge, identify research gaps, establish theoretical foundations, and provide context for ongoing or future research. (Firman, 2018); (Suyitno, 2021); (Jelahut, 2022).

Results and Discussion

Definition and Types of Multimedia

Multimedia is a combination of various forms of media used to present information or content through text, images, audio, video, and animation simultaneously or integrated (Sudarmo et al., 2021). The main purpose of multimedia is to create an interactive and more meaningful experience for users by utilising the advantages of each media in conveying messages or information. Multimedia is often used in the fields of education, entertainment, advertising, and communication to increase audience appeal and understanding of the material presented (Nurhayati et al., 2023).

Multimedia in education includes various types of media used to create a more interactive and effective learning experience. One type of multimedia that is often used is audio, which includes voice recordings, podcasts and listening books (Nivetiken et al., 2024). Audio can be used to reinforce students' understanding through oral explanations, listening to examples of conversations in a foreign language, or enjoying a narrated story. Audio also allows students to learn while doing other activities, such

as while travelling or exercising, making it a flexible and accessible medium (Chuang et al., 2022).

Video is another type of multimedia that is very popular in education. Videos can include lectures, demonstrations, documentaries and tutorials. The use of videos allows students to see visualisations of abstract concepts, follow steps in experiments or art projects, as well as gain a clearer view of phenomena that are difficult to understand through text alone (Shen, 2023). Interactive videos, where students can participate in quizzes or selection of learning paths, are also growing in popularity as they allow for more personalised and active involvement in the learning process (Majkić & Ilčešin, 2022).

Today's rapidly developing interaction technologies also play an important role in revolutionising the education system. Types of multimedia applications such as simulation software, learning games, and e-learning platforms allow students to interact directly with lesson content while being practically engaged (Sitopu et al., 2024). This participatory learning model can motivate students to continue learning through hands-on practice, receive instant feedback, and make the process of understanding more challenging and fun. For example, science simulations allow simulating virtual experiments to understand the universe indirectly, while lesson support games can help understand maths concepts in a creative and exciting way (Guna et al., 2024); (Hairiyanto et al., 2024).

Other useful forms of multimedia are animation and graphics. Animation can be used to explain complex dynamic processes such as biology or physics that are difficult to understand through static media. Graphic information and infographics visualise data in an easy-to-understand manner to reinforce understanding through visual representations. Together with other media, animation and graphics can create a more interesting and effective learning environment so that students understand and remember the material more easily (Murtiningsih et al., 2023).

Beyond these four types of multimedia, virtual reality (VR) and augmented reality (AR) technologies are also gaining popularity in education. VR allows students to explore virtual environments in real time such as travelling around other planets or virtual tours to historical sites. This creates an immersive and interactive learning experience (Cockerill, 2024). Meanwhile, AR incorporates digital information directly into the real world such as providing direct visualisation to understand concepts more easily. For example, AR can show organ structures directly on a 3D body model when a mobile phone camera is pointed at an anatomical drawing (Rahmawati, 2024).

Collaborative software such as online discussion software, virtual classes, and cloud-based group work platforms also play an important role in educational multimedia. These tools allow students to learn together despite being in separate locations, facilitating discussions, group presentations and joint projects. By utilising collaborative software, students can share ideas, edit documents simultaneously and

communicate in real time, which is very beneficial in the era of distance education (Fardhansyah, 2023).

Digital presentations are another type of multimedia that is often applied in education. Through the use of presentations built on platforms such as PowerPoint, Prezi or Google Slides, teachers are able to structure and present subject matter in a more organised and visual way (Ningrum & Fradana, 2024). Digital presentations consist of text, images, graphics and videos that can be combined to reinforce key teaching points. The utilisation of attractive presentation slides can help improve student focus and understanding during the learning process (Lin & Wu, 2020).

Finally, other types of multimedia such as interactive documents and e-books have also made significant contributions to education. E-books allow students to easily access course materials via their devices, often with additional features such as hyperlinks, videos and interactive quizzes to enhance the learning experience (Pham & Le, 2023). Interactive documents allow students to interact directly with the content, for example by filling in forms, following interactive storylines, or viewing diagrams that can be zoomed and rotated. These all help to create a more dynamic learning environment that is responsive to students' needs (Yusuf et al., 2023).

The integration of various types of multimedia in education not only makes the teaching-learning process more engaging and interactive, but also helps students understand and remember information better through a variety of delivery methods tailored to different learning styles.

English Vocabulary Mastery

Vocabulary definition is a person's understanding of the meaning, meaning, and use of words in a particular language appropriately and effectively in various communication contexts. This ability includes knowledge of word meanings, word usage in sentences, and understanding of synonyms, antonyms, and subtle differences in meaning (Begunova & Belts, 2022). The broader a person's vocabulary, the freer he or she is to convey ideas, feelings, and information clearly and accurately, both in oral and written interactions. Understanding vocabulary is very important in enriching language skills and understanding texts in depth (Usman, 2020).

Vocabulary is a crucial element in English language learning. Without adequate vocabulary, one's ability to understand and communicate in English will be severely limited. An abundant vocabulary allows students to understand readings, hear conversations or media in English, and convey themselves better and more precisely. Understanding vocabulary also helps in strengthening the understanding of grammar and sentence structure, as appropriate vocabulary serves as a tool to form correct and comprehensible sentences (Liao et al., 2023).

In addition, a rich vocabulary is key to improving other language skills such as writing and speaking. In writing, proper word selection can enrich writing and improve

their ability to convey ideas or stories clearly and interestingly (Somjai & Soontornwipast, 2020). While in speaking, students can express their opinions and participate in discussions more confidently and efficiently if they have enough vocabulary. Therefore, vocabulary learning becomes one of the main focuses in the English learning curriculum, as vocabulary mastery is an important foundation for overall language proficiency. (Mentari et al., 2024)

Use of Multimedia in Education

The use of various forms of media in education today is increasingly important along with the rapid development of technology. Multimedia, which includes text, images, sound, video, and animation, allows the delivery of learning materials to be more interesting and interactive (Mentari et al., 2024). By combining various media, teachers are able to explain complex concepts more easily and make the learning process fun for students. For example, animated videos can help illustrate a scientific process that is difficult to understand through text alone, while sound can be used to teach the pronunciation of foreign words (Murtiningsih et al., 2023).

The presence of multimedia in education also facilitates learning according to each student's learning style. For example, students who learn more by sight can understand concepts better through pictures or videos, while students who prefer to learn by hearing will be helped by the use of sound (Temaja, 2023). Thus, multimedia helps to create a more inclusive learning environment where all students have a better opportunity to understand the subject matter according to their own learning styles (Putri & Zuhri, 2023).

In addition, multimedia enables self-learning and distance learning. With teaching materials presented in digital form, students can access and learn materials anytime and anywhere at their own pace. Online learning platforms equipped with video tutorials, interactive exams, and discussion forums also encourage students to be more independent in learning and seeking additional information outside the classroom. This is certainly very relevant during the pandemic or situations where physical access to schools is limited (Lin & Wu, 2020).

However, the use of multimedia in education must also be accompanied by a smart and optimised approach. It is important for teachers to consider the multimedia content chosen so that it fits the learning objectives and does not distract students from the core material. In addition, the skills to evaluate and select quality and reliable multimedia sources are also important. Teachers should constantly update their knowledge of the latest technologies and methodologies to maximise the benefits of multimedia in the learning process. Thus, the utilisation of multimedia can significantly improve the quality of education and students' learning experience.

The Effect of Multimedia on Vocabulary Mastery

The use of various media in the educational process has been shown to have a significant impact on term mastery. Children and adults who are learning a new language often find that combining written text, static images, audio, and video in teaching materials helps to strengthen the memory of new words (Kim & Kim, 2022). For example, presenting relevant illustrations or video clips that illustrate the use of terms in everyday contexts can make the words easier to remember. Audio also allows students to hear the correct pronunciation, so they will not only remember the terms visually, but also auditorily (Jiang & Tse, 2021). In addition, multimedia allows for more interactive and engaging learning. Online learning applications and platforms that utilize various media often have features such as word games, interactive trials, and listening exercises, all of which are designed to strengthen term mastery in a fun way (Shen, 2023). This interactivity encourages students to be more actively involved in the learning process, thereby increasing their motivation and interest. When students are more motivated, they tend to repeat and practice more, which is very important for internalizing new terms (Pramadanti, 2023). However, the effectiveness of multimedia in mastering terms also depends heavily on the quality and relevance of the content used. Content that is inappropriate or too complicated can distract students and actually hinder the learning process. Therefore, it is important for educators to carefully select and organize multimedia materials, ensuring that the content is clear, interesting, and appropriate to the students' language level. With the right approach, multimedia can be a very effective tool in enriching students' vocabulary and improving their overall language skills.

Comparison of Traditional and Multimedia Approaches

The use of multimedia in education offers a variety of advantages over conventional teaching methods. One of its main advantages is the ability to present a more interactive and engaging learning experience (Dewi et al., 2022). By utilizing a combination of text, images, sound, and video, multimedia can help explain concepts that may be difficult to understand through traditional methods such as lectures and reading. For example, multimedia can help demonstrate complex processes in science or mathematics through animations and simulations, which are often easier for students to understand (Park & Hong, 2022). In addition to being interactive, multimedia also allows for more flexible and personalized learning. Students can access learning materials anytime and anywhere through web-based learning platforms, which is important in the context of distance learning and self-study (Alharbi, 2022). This gives students the opportunity to learn at their own pace, repeat material they don't understand, and jump to parts they have mastered. In a conventional classroom environment, the time and opportunity for such personalization are often limited. However, the use of multimedia also has several disadvantages. One of them is the dependence on adequate technology and infrastructure. Not all students or schools

have access to the necessary hardware and software, such as computers, tablets, or a stable internet connection. This can create inequities in educational accessibility. Additionally, excessive or undirected use of multimedia can lead to confusion and distraction, with students focusing more on the visual appeal than on the concepts being taught. Therefore, it is important for educators to balance the use of multimedia with traditional methods, ensuring that technology is used as a tool that enhances the learning experience, rather than replacing it entirely.

Factors Affecting Multimedia Effectiveness

The effectiveness of using multimedia technology in learning is influenced by several important factors that need to be balanced in order to achieve optimal results. One of the main factors is the quality of digital content. Multimedia content must be relevant, accurate, and tailored to the needs of students. An attractive presentation alone is not enough if the material delivered is not in accordance with the curriculum or does not support learning objectives (Setyawan et al., 2020). Therefore, selecting the right materials and efforts to ensure that multimedia content supports the achievement of core competencies are very important.

Equally important, instructional design also plays a key role in the effectiveness of multimedia. Good design must consider pedagogical principles, such as the use of visual elements that are not excessive, logical arrangement of materials, and integration of evaluations to measure student understanding (Ruhama & Maulina, 2020). A clear learning flow with intuitive navigation will help students focus on learning without being distracted by confusion in using the multimedia device. Student engagement increases when they are given the opportunity to actively interact with the material through quizzes, simulations, or online discussion forums (Hsu & Hwang, 2023).

The success of multimedia in increasing the effectiveness of learning is also greatly influenced by the readiness of the technology used. Adequate infrastructure, including hardware such as reliable computers and software, and stable internet access, are essential to support the use of multimedia. Without adequate infrastructure readiness, it can cause inconvenience or even failure in the learning process (SARNOU, 2023). Therefore, investment in technology and maintenance of these facilities need to be prioritized so that multimedia implementation can run smoothly. No less important is the capacity and skills of teachers in utilizing multimedia technology. Training and professional development for educators in how to design, implement, and evaluate the use of multimedia must be emphasized. Teachers who are proficient in educational technology are able to choose the right devices, manage classes effectively, and motivate students to actively participate in learning (Fitriani et al., 2023). Without adequate skills, multimedia can be a less effective tool and only add to the burden on teachers and students. Thus, the teacher's ability factor must receive serious attention

in efforts to increase the effectiveness of the use of multimedia in Education (Sanjaya, 2020); (Ningrum & Fradana, 2024).

Conclusion

The implementation of multimedia technology in teaching English vocabulary in elementary schools has been proven to have a significant positive impact on student mastery. Through multimedia software such as interactive animations, videos, and online learning applications, students can be more involved in learning that is more fun and challenging. Multimedia offers a more varied learning experience, allowing students to see and hear new words in context, making it easier for them to remember and understand the vocabulary. This more dynamic interaction helps students not only recognize words but also use them in different sentences or situations.

In addition, the application of multimedia technology in English learning can accelerate the learning process and increase student motivation. Multimedia content is often designed with features that can provoke interest in learning, such as interesting animations, music, and educational games that combine elements of competition and challenge. These features help create a more interesting learning atmosphere, which can ultimately increase students' desire to learn and deepen their knowledge of English vocabulary. When students feel happy and motivated, they tend to be more actively involved in the learning process and show faster improvement.

However, to achieve optimal results, the application of multimedia must be supported by the right teaching strategies. Teachers must have the skills to integrate multimedia technology into their lesson plans effectively, as well as conduct ongoing evaluations to assess student progress. Adequate technological support and a conducive learning environment are also important requirements for the smooth implementation of multimedia and have a positive impact on English vocabulary mastery. Thus, multimedia is not only a tool, but is a critical component that can expand the learning experience and optimize English learning outcomes at the elementary school level.

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