English Learning Strategies for Young Learners Using Digital Media as Part of the Implementation of the Merdeka Curriculum

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ABSTRACT

To keep up with the times, English learning needs to be learned from elementary school. There are still many human resources in Indonesia who are not proficient or even unable to speak English. This is due to the uneven distribution of English teaching in schools. Many schools did not teach English Education due to several factors, including: first, English is not a compulsory subject in schools. Second, the lack of teachers who can teach English. Third, the lack of learning media that support English teaching. Fourth, the location of the school is far from the city. Fifth, the lack of awareness of the school about the importance of English learning. The purpose of creating this digital learning application and its application in English subjects is to make English learning more enjoyable, thereby increasing students' interest in learning. With this application program, it is hoped that students can easily learn and understand as much vocabulary as possible and how to pronounce the vocabulary in English. The type of research method is a qualitative method. The results show the increasing enthusiasm of SDN 10 Way Lima students for English lessons through mobile web-based digital learning applications, because this application can provide a more interesting learning experience for students. This application can facilitate the process of learning English. It can be accessed anytime and anywhere. Flexible learning time makes it easier for teachers to make student learning activities at school more active, so that learning objectives will be implemented effectively.
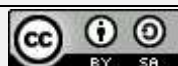
INTRODUCTION

English, though a foreign language in Indonesia, holds global importance as a lingua franca in education, business, science, technology, and international relations. Unlike neighbouring countries such as Singapore, Malaysia, and the Philippines, where English has official status, in Indonesia, it functions primarily as a means of global communication.

Given its dominance in various fields and the demands of globalization, English learning is essential from the elementary level to equip students with cross-cultural communication skills (Márquez Indias, 2022).

As time goes by, the need for English language proficiency is increasing. This is particularly felt in the world of education, where English proficiency is not only an added value but also a basic requirement for students to access information sources, scientific literature, and compete globally. Given that Indonesia is a developing country with continuously improving human resources, English language proficiency is one indicator of national competitiveness. English proficiency among Indonesians remains relatively low. Data from the EF English Proficiency Index (Alamsyah, 2022) places Indonesia in the middle ranking, with scores below the average of several other Southeast Asian countries. This situation indicates a gap between the need for English proficiency and the actual proficiency of the Indonesian people.

One of the causes of low English competency in Indonesia is the uneven distribution of English teaching in elementary schools. Many schools, especially those in rural and remote areas, do not include English in their curriculum. This is influenced by several factors, including: (1) English is not a compulsory subject in elementary schools; (2) a lack of teachers qualified to teach English; (3) limited learning media that support English teaching; (4) schools are located far from urban areas, making it difficult to access educational resources; and (5) low awareness among schools and parents regarding the importance of early English learning (Ardaya et al., 2022). This condition means that most students in rural areas only receive English instruction when they enter secondary school, thus shortening the time to develop language skills.

English education in schools is usually found in urban or integrated schools. This is due to the 2013 curriculum policy, which places English as a local content subject (Ardaya et al., 2022). In the 2006 curriculum, English was a compulsory subject, but in the 2013 curriculum, it was reclassified as a local content subject. According to (Permendikbud, 2014), local content subjects may include arts and culture, crafts, sports, health, languages, and technology. Since schools can choose from a wide range of options, many prioritize local languages or other subjects, resulting in English not always being offered.

The curriculum is an important tool designed around learning needs. Therefore, it undergoes periodic changes so education can meet changing times (Waziana & Andewi, 2024). In 2022, the Ministry of Education,

Culture, Research, and Technology introduced the Kurikulum Merdeka as a response to the national learning crisis. This curriculum emphasizes three key principles: focusing on essential competencies in literacy and numeracy to allow deeper learning, granting teachers flexibility to implement differentiated instruction, and strengthening character education through project-based learning aligned with the Pancasila Student Profile. The profile outlines core values and competencies such as faith, global diversity, cooperation, independence, critical thinking, and creativity that serve as the foundation of curriculum implementation (GTK, 2022; Wahyudin et al., 2024).

In the Merdeka Curriculum, English is an elective subject in elementary schools. It will be taught from third to sixth grade. It is not compulsory in first grade because many students in some areas are still learning Indonesian. However, schools wishing to teach English starting in first grade are welcome to do so, depending on their respective capabilities. This is in accordance with the *Merdeka Belajar* Curriculum policy.

A study shows that schools have begun implementing the Merdeka Curriculum since 2022. All school people demonstrated high enthusiasm and motivation in implementing English language learning at the elementary school level. However, several requirements must be met for effective learning to take place, including the presence of dedicated English teachers in elementary schools, English language training for teachers, and the provision of supporting facilities and infrastructure, particularly learning media. This study also revealed that the absence of English language subjects in the previous curriculum resulted in limited teaching staff and limited availability of learning media, creating challenges that schools must immediately address (Oktavia et al., 2023).

English language education for children can begin at an early age through elementary school, each with its own characteristics. Elementary school students fall into the category of young learners, meaning they are still in the cognitive, affective, and psychomotor stages of development. They possess unique characteristics such as a strong sense of curiosity, a tendency to learn through direct experience, and an easier understanding of information when presented in visual, auditory, and kinesthetic formats. (Harmer, 2001) states that young learners learn best when engaged in enjoyable activities, using their imagination, actively moving, and interacting with their surroundings. Teaching English to young learners is no easy task. Teaching English to children requires teachers not

only to master the material but also to master creative and innovative teaching strategies. Teachers need to use appropriate learning strategies to engage and motivate students in the learning process. (Wulandari et al., 2020) emphasize that teachers need to use approaches that are appropriate to student characteristics, such as learning through play, project-based learning, or the use of digital media. English language learning focuses on strengthening soft skills. There are six language skills: listening, speaking, reading, viewing, writing, and presenting, integrated into various types of texts. By mastering English, students will have greater opportunities to interact using a variety of texts. Learning English gives students the opportunity to communicate with people from different cultural backgrounds around the world.

Elementary school students are young learners with different characteristics than adult learners. Young learners enjoy playing and possess a wealth of imagination and fantasy. Prospective elementary school teachers need to understand their world and master both spoken and written English. Teachers also need to possess the ability to teach using English as the language of instruction in the classroom. Furthermore, elementary school English teachers must be able to use English communicatively and possess effective English teaching skills (Sepriyadi, 2024).

The teaching of English to young learners in Indonesia remains a subject of debate among educators and parents. While some view early exposure as beneficial for linguistic development and global opportunities, others fear it may hinder mastery of the national language. Parental and teacher perceptions play a significant role, particularly among middle- to upper-class families who often encourage participation in private English courses. However, challenges persist due to the limited number of qualified teachers with appropriate training in young learner pedagogy. Two key aspects must be addressed in this context: first, the implementation of effective teaching strategies such as video-based learning that supports both language acquisition and character development; and second, the role of parental and teacher perceptions, as both groups generally believe that the earlier children begin learning English, the greater the benefits they will gain (Lesia et al., 2022).

The young learner group is unique; how they are analyzed as unique learners is outlined in the following table.

Table 1.
Uniqueness of Young Students

No	Young Learner
1.	They respond, although they do not understand.
2.	They learn from everything around them: they learn indirectly rather than directly.
3.	They understand mostly when they see, hear, touch, and interact rather than from explanations.
4.	Abstract concepts are difficult to deal with.
5.	They generally display a curiosity about the world and an enthusiasm for learning a language.
6.	They like talking about themselves and responding to learning that uses their lives as the main topic.
7.	They love discovering things, making or drawing things, using their imagination, moving from one place to another, and solving puzzles.
8.	They have a short attention span; they can easily get bored after 5-10 minutes.
9.	Teachers should have a rich repertoire of activities to help young children receive information from a variety of sources and plan a range of activities for a given time period.
10.	Teachers should work with students individually or in groups
11.	Teachers need to be aware of the students 'interests to motivate them.
12.	The classroom should be colourful and bright with enough room for different activities.

Adapted from: (Harmer, 2007). The Practice of English Language Teaching (4th Ed.). Essex: Pearson Longman

From the table statement above, it can be seen that young learners can better understand lessons when interacting directly or practicing. Young learners can better understand the material when they see, hear, and interact directly rather than just listening to theory. In general, young learners have a fairly high curiosity about something foreign or something unusual, for example, learning a language. Therefore, English teachers must have a variety of teaching media to help young learners' learning activities.

Student learning interests will affect student learning outcomes. Low learning interest can be caused by many factors, one of which is a learning method that is considered boring. An effective learning method for elementary school children is usually a learning method that emphasizes direct experience, interaction, and collaboration, that allows them to remain active while learning. Methods that can be used for the learning process for

young learners include project-based learning, learning while playing, learning outside the classroom, and collaborative learning using digital technology. The implementation of multimedia-based English learning applications can increase student engagement in the learning process. This method not only fosters greater learning interest but also encourages more active interaction between students and lecturers, resulting in a more enjoyable and conducive classroom atmosphere (Waziana et al., 2017).

Education must begin to adapt to the use of media accessed on gadgets or smartphones, so that students' interest in learning can increase again, which means teaching students to be wiser in using media accessed on smartphones for learning. Several applications can be accessed on smartphones, both for learning and for playing (Fadhli et al., 2021).

Digital learning media has become increasingly prevalent in the era of the industrial revolution, marked by rapid advancements in internet technology. These developments have transformed various aspects of life through innovations such as artificial intelligence (AI), robotics, and the Internet of Things (IoT). In education, IoT enables broader access to knowledge, for instance, through smartphones that allow students to utilize digital media to support their learning activities.

Smartphones are technological tools that support English learning, including the use of various features that help develop interactive language skills. Various features on Smartphone applications can be used as English learning tools, such as for listening skills, speaking, reading, vocabulary mastery, to writing skills (Suhendar & Syakir, 2022). The definition of digital learning includes aspects of hardware (infrastructure) in the form of a set of computers that are interconnected with each other and have the ability to send data, either in the form of text, messages, graphics, video, or audio (Rozie & Pratikno, 2023).

Learning using digital media is one of the learning methods that attracts students' attention because learning using digital media can eliminate boredom in students and can create a pleasant learning atmosphere so that it can increase interaction between teachers and students. The use of digital media for learning, for example, can store unlimited learning material files, can save storage space, is more practical because it can be accessed anywhere and anytime with online system services (Adventyana et al., 2023). Types of digital learning media include interactive multimedia, digital video and animation, podcasts, augmented reality (AR), virtual reality (VR), game-based learning, e-books, and online learning platforms such as Moodle, Google Classroom, Khan Academy,

Mobile Learning, Social Media, Websites, and Cloud-Based Electronic Learning.

Teaching English to young learners is challenging. Teachers must use various strategies and media to engage students. Digital learning models help deliver materials and provide media. They also allow two-way interaction through e-learning tools like computers, the internet, software, and applications. These tools make learning more innovative and effective. E-learning is especially useful for increasing student interest. Research shows that collaboration with digital-based models boosts learning interest in elementary students (Nurhaliza et al., 2025).

Despite the availability of various digital learning media, there are many schools, including SDN 10 Way Lima, that have not yet adopted them due to teachers' limited knowledge of teaching English to young learners. English learning at this school remains conventional, relying on lectures and textbooks, which results in monotonous lessons and reduced student engagement. To address this, a simple mobile web-based application was developed to provide an attractive and accessible medium for English learning. The purpose of this application is to make learning more enjoyable, enhance students' interest, and help them expand their vocabulary and improve pronunciation anytime and anywhere.

RESEARCH METHOD

Qualitative research is a type of research whose findings are not obtained through qualification procedures, statistical calculations, or other methods that use numbers. Therefore, this type of research method is qualitative, because the data produced is in the form of descriptive words, and not numbers. Meanwhile, the method used to create the application is the waterfall method. This method is a method that uses a systematic and sequential approach to software development. It starts with user requirements specifications, then continues with the planning stage, modelling, system delivery to customers/users (deployment), and ends with support for the complete software produced (Rukajat, 2018). The Waterfall method is the stages of a system development process are orderly and easy to apply. So the waterfall method is suitable for software whose needs are clear from the start, so that errors are minimal so and software developed with this method usually produces good quality (Sanubari et al., 2020).

The data collection was conducted through observation, interviews, literature review, and needs analysis. Observations of English learning at SDN 10 Way Lima (grades III–VI) showed that teaching relied mainly on textbooks.

Interviews with one English teacher and 40 students (22 males, 18 females) indicated that most students perceived English as difficult, particularly in vocabulary comprehension and pronunciation. A needs analysis was then carried out to ensure the proposed application aligned with user requirements and could serve as an alternative medium to support students' English learning.

The data analysis was conducted to identify references, evaluate the existing system, and determine potential problems, which became the foundation for designing a more effective solution. The system was then developed through coding, followed by testing to ensure functionality and suitability to user needs. After meeting the established criteria, the application was implemented for SDN 10 Way Lima students as a medium for English learning, providing a more interactive and engaging experience.

RESULT AND DISCUSSION

Based on interviews with English teachers and students at SDN 10 Way Lima, it was revealed that the previous learning process was still dominated by the lecture method, resulting in students being passive and less engaged in learning. Classroom observations also showed that limited learning media led to low student motivation, especially in English. These findings became the basis for developing a new system that was expected to address existing learning challenges. The designed system was then realized through data analysis, design, and coding. Afterward, testing was conducted to ensure the application's functions ran according to user needs. The trial results showed that the application was able to increase student engagement, particularly through interactive features that were more engaging than conventional methods. Thus, the implementation of this system not only resulted in a technological product, but also a response to real needs in the field, as demonstrated by the results of previous interviews and observations.

The needs analysis includes the identification of materials, application features, and their suitability to the curriculum. Based on observations, interviews, and needs analysis, a mobile web-based digital learning application program system was designed to increase student engagement and facilitate teacher delivery. This application is equipped with several main menus, namely: (1) Home Page, (2) Learning & Practice Menu, (3) Class Selection Page Menu, (4) Third Grade Material Menu, (5) Fourth Grade Material Menu, (6) Fifth Grade Material Menu, and (7) Sixth Grade Material Menu. Each menu is designed so that students can access learning

materials according to their level, while also receiving interactive exercises that can improve their understanding. Thus, the resulting product is not only a digital application, but also an answer to real problems found through observations and interviews in the field. The following shows several interface images of the menus that have been designed as a form of implementation of this system.

Main Page

The main page contains a play and exit button menu. The play button is used if the user wants to enter/start running the website application, and the exit button is used if the user wants to exit the application.

Figure 1.
Main Page View

Learning & Practice Menu

The Learn & Practice menu page contains 2 features, namely the Study menu and the Exercise menu. The learn menu contains English learning materials, and the Practice menu contains practice questions on the material that has been studied.

Figure 2.
View of the Learning & Practice Menu Page

Class Selection Page Menu

On the class selection menu page display, there are number buttons 3, 4, 5, and 6 which can be selected to adjust the class level.

Figure 3.
Class Selection Menu Page View

English Class 3 Material Menu

The class 3 page displays data on what materials are available for English learning in class 3. It contains materials on introducing letters, numbers 1-30, fruits, animals, and vegetables. This material has been adjusted to that in the teacher's handbook.

Figure 4.
Class 3 Material Menu Page Display

Material Menu in Class 4

The class 4 page displays data on what materials are available for English learning in class 4. It contains materials on recognizing numbers 31-60, objects in the classroom, colors, shapes, food & drinks, and vehicles. This material has also been adjusted to match that in the teacher's handbook.

Figure 5.
Class 4 Material Menu Page Display

Class 5 Material Menu

The 5th-grade page displays data on what materials are in English learning in the 5th grade. It contains materials on introducing numbers 61-100, rooms in the house, objects in the bedroom, objects in the living room, objects in the bathroom, and objects in the kitchen. This material has also been adjusted to match that in the teacher's handbook.

Figure 6.
Class 5 Material Menu Page View

Class 6 Material Menu

The 6th grade page displays data on what materials are in English learning in the 6th grade. It contains materials on introducing clothing, body parts, names of days, names of months, family parts, and professions. This material has also been adjusted to match that in the teacher's handbook.
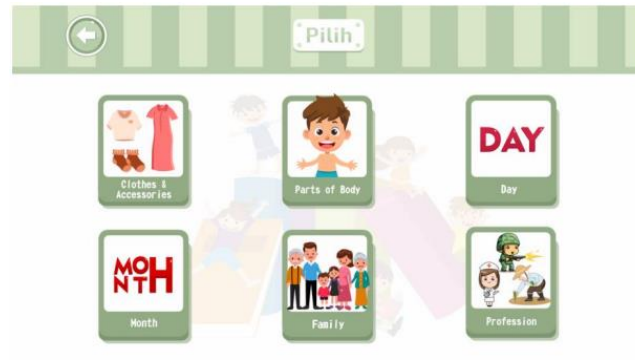
Figure 7.
Class 6 Material Menu Page Display

View of One of the Contents of the Material

The content page is a page that contains the contents of the learning material that will be studied. Which contains material images, English text, and English pronunciation.
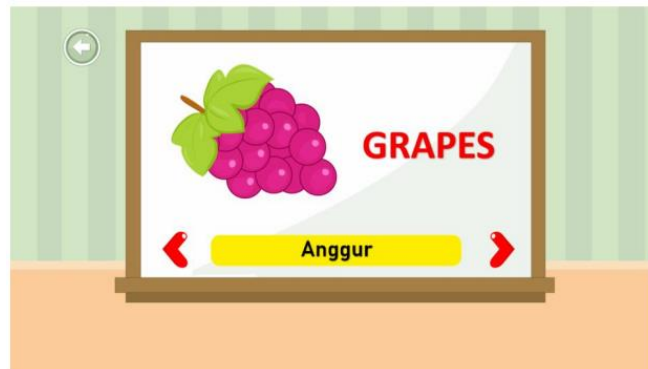

Figure 8.
Content Page View

Practice Page View

The practice page contains multiple-choice questions related to the material that has been studied

Figure 9.
Initial Practice Page View

This study produced a Web Mobile-Based Digital English Learning Application at SDN 10 Way Lima, and is applied as a learning medium to help teachers and students in learning English. In the process, this research was carried out with several stages of work procedures, namely analyzing and organizing materials, designing and applying them in the form of Web Mobile-Based Learning Applications. System development is carried out using the waterfall system development method, system design is carried out by creating a Context Diagram, and DFD to create a new system flow design, then a design is made for the system display through Corel Draw 22, then implemented in the Powerpoint 2016 application, after that converted through Ispring Suite 10 to produce an HTML format file which can then be run in the Browser ".

The advantages of this application are 1.) This application will provide a more interesting learning experience for students, 2.) This application can facilitate the process of learning English, 3.) Can be accessed anytime and anywhere, 4.) Flexible learning time, so students who want to repeat their lessons or materials that have been given at school can also study them again at hom, 5.) Makes it easier for teachers to make student learning activities at school more active, so that learning objectives will be implemented effectively.

The implementation of the Mobile Web-Based Digital English Learning Application is done by socializing the use of this application to teachers, and later, teachers will socialize it to students. Teachers can enter additional materials or assignments, and exercises in the menu provided, so that the materials and exercises will be updated. Additional notes: teachers and students must ensure that their smartphones are connected to the internet so that the application can run properly.

After being socialized, the researcher took several student samples to determine the level of student preference for the application. The data image shows that students' preference for learning English subjects using this web-based application shows that most students like the application. This is because this application increases knowledge about the basics of learning English, and several vocabularies can help students learn English material. In this application, there are also several practice questions that can help students learn. It is hoped that students will be motivated to use gadgets or smartphones wisely.
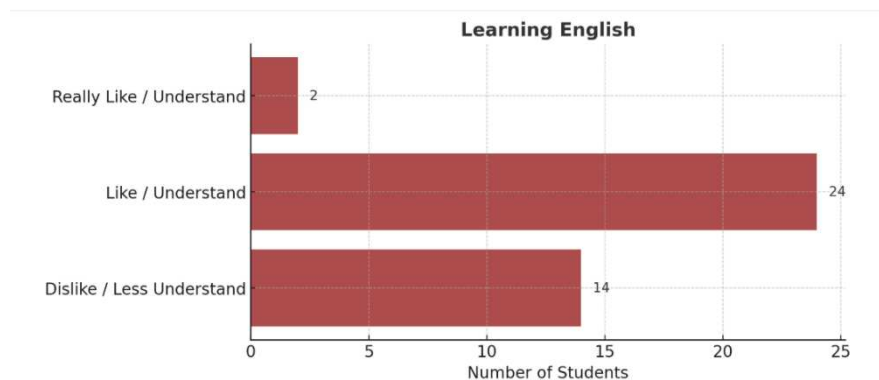

Figure 10.
Questionnaire results on students' level of preference for the Mobile Web-Based Digital English Learning application.

Discussion

The results of this study indicate that the implementation of mobile web-based digital media in English learning at SDN 10 Way Lima was able to increase student interest and engagement in the learning process. This condition differs from conventional learning methods that previously relied more on lectures and textbooks, resulting in students tending to be passive and less motivated. These findings align with (Harmer, 2001) opinion, which asserts that young learners more easily understand information through direct experience, enjoyable activities, and interactions with visual, auditory, and kinesthetic media. Thus, digital learning applications have proven to be able to meet the needs of students who have the unique characteristics of young learners.

Previous research conducted by (Wulandari et al., 2020) emphasized the importance of creative learning strategies tailored to the characteristics of elementary school students, such as playful or project-based learning. Meanwhile, research by (Waziana et al., 2017) showed that the use of multimedia applications in English learning can improve student-teacher interaction and create a more enjoyable classroom atmosphere. The findings

in this study support both findings but provide a distinct contribution by presenting a mobile web-based application that allows students to learn anytime and anywhere, making it more flexible than previous learning models that were still limited to multimedia devices in the classroom.

Furthermore, (Oktavia et al., 2023) revealed that the implementation of the Independent Curriculum requires specialized English teachers, training, and the provision of digital learning media to support effective learning in elementary schools. This research provides evidence that digital applications can be a real solution to address the limitations of teaching media in elementary schools, especially in areas that previously relied on conventional methods. Thus, this research strengthens the implementation of the Independent Curriculum, which emphasizes flexibility, learning differentiation, and the use of technology.

The research findings of (Lesia et al., 2022) also confirmed that parents' and teachers' perceptions of the importance of early English learning are a key factor in the program's success. This study found that the use of digital applications received a positive response from both teachers and students, as they were perceived as making learning more engaging and tailored to children's needs. This demonstrates alignment with learning motivation theory, which suggests that the use of digital media can increase student interest, engagement, and motivation (Adventyana et al., 2023).

The main difference between this study and previous research lies in its focus on implementing a mobile web-based application as a teaching medium integrated with curriculum materials from grades III to VI. While previous research focused more on general strategies (Sepriyadi, 2024; Wulandari et al., 2020) or the use of multimedia in the classroom (Waziana et al., 2017), this study presents a new innovation that is more practical, easily accessible, and supports flexible learning in accordance with the spirit of the Independent Curriculum.

Therefore, it can be concluded that this research not only contributes to the development of digital teaching media for young learners but also demonstrates how technology can provide a solution to the limitations of conventional learning. The resulting application can serve as a strategic alternative to support teachers and students in elementary schools, while also enriching the literature on the implementation of digital learning in the context of elementary education in Indonesia.

CONCLUSION

This mobile web-based application was developed to support the Merdeka curriculum by making English learning more engaging and accessible. Using the waterfall development model, the system enables students to expand their vocabulary and practice pronunciation anytime and anywhere, thereby fostering greater enthusiasm for learning. The findings show that the application provides meaningful contributions to English learning for young learners, including offering a more enjoyable learning experience, flexible access, opportunities for lesson review, and support for teachers in creating more active classrooms. Designed according to the learners' needs, the application still has potential for further development, such as the addition of materials, audio features, and varied exercises to adapt to future demands.

REFERENCES

Adventyana, B. D., Salsabila, H., Sati, L., Galand, P. B. J., & Istiqomah, Y. Y. (2023). Media pembelajaran digital sebagai implementasi pembelajaran inovatif untuk sekolah dasar. *Jurnal Pendidikan Dan Konseling (JPDK)*, *5*(1), 3951–3955.

Alamsyah, I. E. (2022). *Indeks Kecakapan Bahasa Inggris Indonesia Turun Peringkat 81 dari 111 Negara*. REPUBLIKA.CO.ID. https://www.republika.co.id/berita/rli40n349/indeks-kecakapan-bahasa-inggris-indonesia-turun-peringkat-81-dari-111-negara?utm_source=chatgpt.com

Ardaya, A. C., Rahmadani, S. A., & Alfarisy, F. (2022). Penerapan Pembelajaran Bahasa Inggris Berdasarkan Kebijakan Kurikulum 2013 di Sekolah Dasar Negeri 155 Gresik. *Jurnal Pendidikan Indonesia*, *3*(1), 25–33.

Fadhli, K., Sholicha, N. N., Sahroni, S., Chasanah, U., & Anandita, S. R. (2021). Penerapan Media Pembelajaran Aplikasi ID (Inggris â€"Diniyah) Sebagai Upaya Peningkatan Minat Belajar Siswa SD Negeri Rejosopinggir. *Jumat Pendidikan: Jurnal Pengabdian Masyarakat*, *2*(3), 160–167.

GTK, S. (2022). *Menilik Kurikulum Merdeka: Pembelajaran dengan Paradigma Baru dan Berdiferensiasi*. Direktorat Jenderal Guru, Tenaga Kependidikan, Dan Pendidikan Guru. https://gtk.dikdasmen.go.id/read-news/menilik-kurikulum-merdeka-pembelajaran-dengan-paradigma-baru-dan-berdiferensiasi

Harmer, J. (2001). The practice of English language teaching. *London/New York*, *32*(1), 401–405.

Harmer, J. (2007). The practice of English language teaching (Fourth Edi). *UK: Pearson Education Ltd*.

Lesia, E. S., Petrus, I., & Eryansyah, E. (2022). Teaching English for young learners in elementary school: Perceptions and strategies. *International Journal of Elementary Education*, *6*(1), 142–148.

Márquez Indias, A. (2022). *Social Media and Intercultural Learning: An approach to EFL for Secondary Students*.

Nurhaliza, A. P., Damayanti, L., Hartanti, R., & Iskandar, S. (2025). Development of a Collaborative Approach with a Digital-Based Learning Model to Increase Elementary School Students' Interest in Learning. *Journal Of Education And Teaching Learning (JETL)*, *7*(2), 125–136.

Oktavia, D., Habibah, N., Balti, L., & Kurniawan, R. (2023). Kurikulum Merdeka Dan Pengajaran Bahasa Inggris Di Sekolah Dasar: Need Ansalisis Study. *Jurnal Muara Pendidikan*, *8*(1), 257–265.

Permendikbud. (2014). Permendikbud 79 Tahun 2014. *Permendikbud 79 Tahun 2014 Tentang Muatan Lokal K13*, *53*(9), 1–5.

Rozie, F., & Pratikno, A. S. (2023). *Media Pembelajaran Digital dalam Pembelajaran di Sekolah Dasar*. Rena Cipta Mandiri.

Rukajat, A. (2018). *Pendekatan penelitian kualitatif (Qualitative research approach)*. Deepublish.

Sanubari, T., Prianto, C., & Riza, N. (2020). *Odol (one desa one product unggulan online) penerapan metode Naive Bayes pada pengembangan aplikasi e-commerce menggunakan Codeigniter* (Vol. 1). Kreatif.

Sepriyadi, H. (2024). Upaya Guru Dalam Meningkatkan Kemampuan Bahasa Inggris Bagi Siswa Di Sekolah. *Jurnal Al-Mufidz: Jurnal Pendidikan Agama Islam*, *1*(1), 85–98.

Suhendar, B., & Syakir, S. (2022). Penggunaan Aplikasi Smartphone Untuk Pengajaran Kosakata Bahasa Inggris Bagi Anak Usia Sekolah Dasar, Klender Jakarta Timur. *Community Engagement and Emergence Journal (CEEJ)*, *3*(3), 242–245.

Wahyudin, D., Subkhan, E., Malik, A., Hakim, M. A., Sudiapermana, E., LeliAlhapip, M., Nur Rofika Ayu Shinta Amalia, L. S., Ali, N. B. V., & Krisna, F. N. (2024). Kajian Akademik Kurikulum Merdeka. *Kemendikbud*, 1–143.

Waziana, W., & Andewi, W. (2024). ENGLISH LANGUAGE LEARNING IN ELEMENTARY SCHOOLS USING DIGITAL LEARNING MEDIA TO SUPPORT THE IMPLEMENTATION OF THE CURRICULUM MERDEKA. *Jurnal Smart*, *10*(2), 118–131.

Waziana, W., Anggraeni, L., & Sari, N. L. (2017). Penerapan Aplikasi Pembelajaran Bahasa Inggris Dasar Berbasis Multimedia. *Jurnal TAM (Technology Acceptance Model)*, *7*, 22–27.

Wulandari, N. L. P. T., Ratminingsih, N. M., & Ramendra, D. P. (2020). Strategies implemented in teaching English for young learners in primary school. *Journal of Education Research and Evaluation*, *4*(3), 227–233.