



Improving English Vocabulary in Kindergarten Students Through One Click English App

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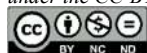
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Abstract: This study aims to overcome the problems in English learning in Perintis II Kindergarten, which faces the limitations of engaging and interactive learning media. Traditional learning methods, such as lectures and flashcards, have not been effective in optimally increasing students' vocabulary mastery. The study developed Android-based learning media to answer this challenge using the Research and Development (R&D) approach. The research process includes product development to evaluate its effectiveness. The results show that the developed application can significantly increase students' vocabulary mastery, with an average score increase of 41.25 points between the pretest and posttest. Teachers responded very positively to the presentation of content in the application. At the same time, parents provided good feedback, although several aspects, such as operations and visuals, still needed improvement. In conclusion, this Android-based learning media effectively supports student learning outcomes while also showing the potential of technology as an innovative learning solution. This application can be an alternative to improve the quality of English learning in Perintis II Kindergarten and contribute to modernizing early childhood education.

Abstrak: Penelitian ini bertujuan untuk mengatasi permasalahan dalam pembelajaran bahasa Inggris di TK Perintis II, yang menghadapi keterbatasan media pembelajaran menarik dan interaktif. Metode pembelajaran tradisional, seperti ceramah dan penggunaan flashcard, belum efektif meningkatkan penguasaan kosakata siswa secara optimal. Untuk menjawab tantangan ini, penelitian mengembangkan media pembelajaran berbasis Android menggunakan pendekatan Research and Development (R&D). Proses penelitian mencakup pengembangan produk hingga evaluasi efektivitasnya. Hasil menunjukkan bahwa aplikasi yang dikembangkan mampu meningkatkan penguasaan kosakata siswa secara signifikan, dengan rata-rata kenaikan skor sebesar 41,25 poin antara pretest dan posttest. Guru memberikan respons sangat positif terhadap penyajian konten dalam aplikasi, sementara orang tua menyampaikan umpan balik baik, meskipun terdapat beberapa aspek seperti operasional dan visual yang masih perlu penyempurnaan. Kesimpulannya, media pembelajaran berbasis Android ini efektif dalam mendukung hasil belajar siswa, sekaligus menunjukkan potensi teknologi sebagai solusi pembelajaran inovatif. Aplikasi ini dapat menjadi alternatif untuk meningkatkan kualitas pembelajaran bahasa Inggris di TK Perintis II dan memberikan kontribusi dalam modernisasi pendidikan anak usia dini.

A. Introduction

English language education is critical in today's era of globalization. Because English language education provides a competitive advantage and opens up vast opportunities in various aspects of life. English is a vital bridge of international communication, allowing one to participate actively in the global community.

By becoming fluent in English, one can easily communicate in an international business environment, access the latest information and scientific literature generally delivered in English, and engage in cultural and idea exchanges that cross national boundaries. English language education also opens up access to the influence of global media and entertainment. Investing in English language education is not only an investment in language skills but also an investment in mobility and opportunity in an ever-growing global era.

English is the most commonly used international language in various fields, such as business, technology, and academics. Therefore, English language learning has been taught since early childhood, including at the early childhood education level, such as in Perintis II Kindergarten. However, English language learning in Perintis II Kindergarten still faces many obstacles. One of the obstacles faced is the lack of interesting and interactive learning media. Learning monotonous and less interesting media can make children quickly bored and less interested in the learning process.

Early childhood English learning is only an introduction and the basics. So, it is necessary to introduce English vocabulary numbers & alphabets, various types of fruits, animals, body parts, and colors. Given the importance of English for the future of children's education, children should start learning English from an early age. Although early childhood thinking is superior to adult thinking in some ways, this is done so that early childhood can get to know English more than adults (Na'imah, 2023).

However, the number of English vocabulary introduced to children is still limited, and the language is simple for children to understand (Nasution, 2016). However, it is known that children's English mastery is still relatively high based on observation findings conducted at Perintis II Kindergarten in December 2023. This can be seen from the relatively low level of English vocabulary mastery because many early childhood children still cannot pronounce English words and do not know English words.

The Merdeka Curriculum is currently implemented in Perintis II Kindergarten, so English learning is one of the subjects studied in Perintis II Kindergarten, according to the contents of the Learning Outcomes that the government has provided. There is a learning topic about students' reading skills, where students will learn about letters and their pronunciation and learn simple vocabulary.

Seeing the need for learning media that is expected to meet students' needs in learning letters and simple vocabulary related to body parts in English, the author took steps to design Android-based English learning media so that students can use this learning media wherever they are because this learning media can be accessed at any time but must

still be under the supervision of teachers (at school) and parents (at home) (Wonorahardjo, 2022).

According to initial findings from interviews with English teachers at Perintis II Kindergarten, children are less involved in learning English due to challenges in memorizing and, in particular, pronouncing vocabulary, as found by researchers. In addition, children like to play with picture media shared by their teachers while learning takes place, making it difficult for teachers to express the subjects they are trying to teach effectively. As a result, new game media that combine auditory and visual elements are needed to improve students' vocabulary mastery skills. English learning has begun to be implemented at the kindergarten level by utilizing various techniques to help children learn more vocabulary in the language. However, the results are not optimal in terms of vocabulary mastery. The lecture method and illustrated paper are the techniques and media used, while the methods and media used during learning are less interesting and less varied. The lecture style is less effective and efficient for the introduction of English vocabulary. Strategies for teaching English must be considered to cover all bases.

To improve the quality of English learning in Perintis II Kindergarten, the development of technology-based English learning media is one alternative that can be taken (Drajati & Putra, 2022; Naqiyyah et al., 2024). Technology-based learning media such as Android can make English learning more engaging, interactive, and easy to understand for children. Therefore, this study aims to develop Android-based English learning media for group B students in Perintis II Kindergarten (Saputra et al., 2018). The learning media produced will be designed according to the needs and characteristics of group B students and use language that is easy for children to understand. With the development of Android-based English learning media, students can learn to access English learning media that is easy to understand and fun. A needs analysis must be conducted first before developing Android-based English learning media for group B students in Perintis II Kindergarten (Maharani, 2021). This needs analysis is carried out to ensure that the learning media developed is in accordance with the needs and characteristics of group B students. The needs analysis is carried out by collecting information from various sources, such as literature, case studies, and interviews with teachers and parents of students. The needs analysis results found that group B students in Perintis II Kindergarten have different characteristics from students at higher levels of education. Group B students generally have limitations in speaking English, so learning easy-to-understand and interactive media is needed. In addition, group B students have short concentration and find it challenging to sit still for a long time, so interesting and motivating learning media are needed (Na'imah, 2023; Abdullah et al., 2020; Landebila et al., 2024).

Based on the results of the needs analysis, the developed English learning media must meet several criteria. First, the learning media must be easy for group B students to understand. Second, the learning media must be interactive and fun to increase students' interest and motivation in learning English. Third, the learning media must be presented in

an attractive visual and audio form to improve students' attraction to the learning media (Nita & Wati, 2024; Fatihah, 2022).

By considering these criteria, the developed Android-based English learning media must be designed according to the characteristics and needs of group B students in Perintis II Kindergarten. Thus, the learning media that is developed can help improve the quality of English learning in Perintis II Kindergarten. Choosing the right research title is very important, including research on developing Android-based English learning media for group B students in Perintis II Kindergarten. The proper research title can make it easier to identify the problems being studied, help answer the objectives, and formulate the issues that have been determined. In this case, the selection of the title "Development of Android-Based English Learning Media for Group B Students at Perintis II Kindergarten" is very relevant to the current state of education. Technology in English learning is becoming increasingly important and necessary in today's digital era. Technology-based learning media can be an efficient alternative in improving the quality of English learning in Perintis II Kindergarten, especially for group B students. In addition, this study's results can positively impact the world of education, especially in the development of Android-based English learning media (Naqiyyah & Widiyanti, 2024).

With interactive and easy-to-understand learning media, it is expected to help increase students' interest and motivation in learning English. In addition, using technology-based learning media can also help teachers improve the effectiveness and efficiency of the English learning process in Perintis II Kindergarten (Setiawardhani, 2021).

In the long term, developing Android-based English learning media for group B students at Perintis II Kindergarten can be an example for other schools to develop more innovative and efficient learning media. Thus, it is expected to help improve the quality of education in Indonesia, especially in English learning at the early childhood education level. The development of Android-based English learning media for group B students at Perintis II Kindergarten is a very relevant and essential study to be conducted. Several previous studies have been conducted on using technology-based learning media in English learning in elementary schools (Herlandy et al., 2024).

One related study was conducted by Natalia & Setiawan (2020) entitled "Development of Android-Based English Learning Media for Grade IV Students in Elementary Schools." The study results indicate that using Android-based learning media can improve student learning outcomes in English. In addition, using Android-based learning media can increase students' interest in and motivation to learn English.

Another relevant study was conducted by Aisyah et al (2024) entitled "Development of Android-Based Educational Game Applications for English in Elementary Schools." The study results indicate that using Android-based educational game applications can increase students' interest and motivation in learning English and can improve students' learning outcomes in English (Koca & Çakir, 2022).

Research related to the development of Android-based English learning media at the Early Childhood Education (PAUD) level has shown that this media can improve children's

ability to speak, listen, read, and write in English, as well as have a positive impact on students' interests, motivation, and learning outcomes. One of the studies by Fitriani et al (2022), entitled "Development of Interactive English Learning Media Based on Android for Early Childhood," supports these findings. Based on its relevance and benefits, this study aims to overcome the limitations of engaging and interactive learning media in English learning in Perintis II Kindergarten, especially for group B students (Hiasa et al., 2023; Darwin et al., 2022).

B. Method

The research on developing Android-based learning media to improve English vocabulary mastery in Perintis II Kindergarten refers to the type of Research and Development (development) research. Research and Development (R&D), according to Sugiyono (2018), is a research technique used to create specific items and evaluate their efficiency.

The main objective of this development study methodology is to use Android-based learning resources to help children aged 5-6 years improve their vocabulary in English. According to the opinion above, research and development (R&D) is the process of creating new products or improving existing products while evaluating the product's effectiveness.

The ADDIE approach is used in the creation of this educational software. As the name implies, this model contains five main phases or stages: analysis (A), design (D), development (D), implementation (I), and evaluation (E). The ADDIE model is arranged systematically so that the steps in this study must follow a particular order and cannot be selected randomly.

Research and development is a development model of research findings used to design a new product, which is then systematically tested, evaluated, and refined to influence the criteria of effectiveness, quality, or compliance with standards. Research and development aims to find, develop, and validate a product. The product in this study is Android-based English learning media in Perintis II Kindergarten. The proper development process must be followed to create quality learning media. The ADDIE development model is the process of creating Android-based learning materials. Figure 1 illustrates the steps taken in the research process based on the ADDIE model.

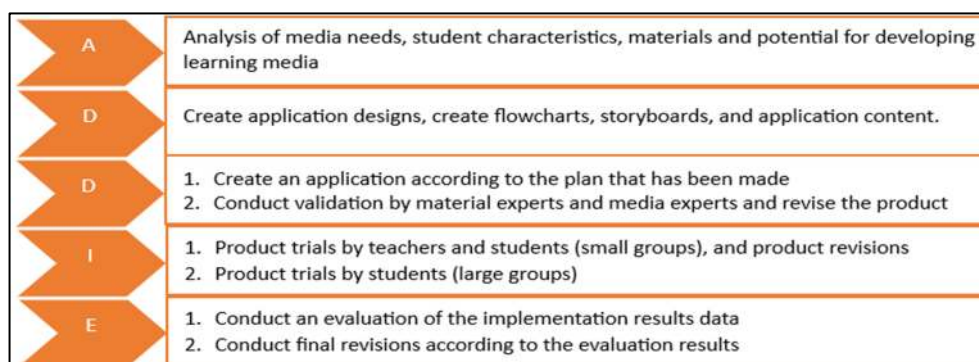


Figure 1. Research Procedures and Stages

In this study, the term "use" refers to the role of the subject who is actively involved, both in the implementation of the research and in the development of multimedia, which is the focus of the study. The research subjects or participants consisted of one teacher who acted as a research assistant and group B students (aged 5–6 years) from Perintis II Kindergarten located in Sungai Raya District, Kubu Raya Regency, West Kalimantan. The selection of participants was carried out using a purposive sampling method based on predetermined criteria. Teachers were selected because they had kindergarten teacher certificates, demonstrated professionalism, and had experience in teaching. In addition, the number of students owned by the teacher was due to research needs, and the facilities at Perintis II Kindergarten were considered adequate to support the operation of English language learning. Group B students were selected because they were in the age range relevant to the focus of the study, namely reading, writing, and arithmetic. Another criterion was the willingness of both teachers and students to be involved in the development of research products.

Data collection in this study was carried out through an approach that integrated quantitative and qualitative data. Quantitative data were obtained through questionnaires designed to measure teachers' responses to the research process and products, with the results processed in numerical form. On the other hand, qualitative data were obtained through direct observation, comments, and recommendations from validators related to the product being developed. This information also includes a description of how the product trial was conducted in the field. In addition, teacher response questionnaires were used to evaluate the practicality of the product that had been developed. With this approach, the research produces numerical data that supports decision-making and rich descriptive information to understand the context and effectiveness of product implementation. This combination of methods aims to ensure that the research results can be applied practically while having strong validity.

C. Result and Discussion

Result

The ADDIE model is one of the most popular and systematic frameworks for developing learning products, and it consists of five main stages: Analysis, Design, Development, Implementation, and Evaluation. The analysis stage in designing Android-based English learning media aims to collect data and information needed to develop effective and appropriate learning media. This analysis stage includes three main components: field studies, student characteristic analysis, and teacher analysis. The results of each element provide in-depth insight into the learning conditions at Perintis II Kindergarten and the problems faced in the English learning process. The field study results show that in learning English, the methods used are conversation methods and assignments. Although this method is quite effective in increasing interaction between teachers and students, there are significant limitations. Students are very dependent on the presence of teachers to explain the material and provide direction in completing assignments. This

dependence causes learning to not run optimally, especially when teachers cannot give full attention to all students simultaneously. To overcome this problem, it is necessary to develop solutions to provide students with more independent learning access through Android-based learning media.

Analysis of student characteristics revealed that group B students of Perintis II Kindergarten have a high enthusiasm for learning. However, they often face difficulties in understanding learning materials without direct assistance from teachers. This limitation indicates the need for engaging, interactive, and easy-to-use learning media to help students learn independently while strengthening their understanding of the material taught in class. Furthermore, teacher analysis highlights the challenges faced in guiding students individually. Teachers cannot give full attention to each student simultaneously due to time constraints and many students. This condition makes teachers need learning media that can function as a tool so students can access learning materials more independently.

In contrast, teachers can allocate their time for more specific guidance. Based on the results of the three analyses, the development of Android-based English learning media is essential. This media is designed to help students understand the material more efficiently, provide teachers with support in delivering learning, and overcome the limitations of traditional learning methods. With the presence of Android-based learning media, the learning process at Perintis II Kindergarten will be more effective and efficient and meet the needs of students and teachers.

In the design stage of the development of Android-based English learning media, the main activities carried out are adjusting the learning design in schools with the product to be developed, designing the material to be included in the application, and determining the instructional objectives to be achieved through the use of the media. The instructional objectives set in this application are: (1) students can recognize human body parts in English, (2) students can name human body parts in English, and (3) students can pronounce the alphabet in English. Several critical stages are carried out in designing teaching materials, including selecting instructional materials, determining appropriate instructional strategies, and determining the criteria for the skills assessment rubric used in the learning process. The material chosen is on human body parts by the English learning curriculum in Kindergarten class B in the even semester, which is then adjusted to the instructional objectives. The adaptive learning method is used, with media in the form of an Android application containing learning materials by the instructional goals.

The assessment rubric criteria are made using a portfolio rubric, where each learning process will be assessed and observed. The initial product design stage begins by designing an application storyboard to facilitate detailed and directed application development. The developed application, named "One Click English," has several key design features that are illustrated in the following design. On the splash screen is a picture of a child reading a book to give the impression that this application is a learning application. There is also a "Home" button to view the contents of the application, "Help" for questions related to the use of the application, and "About" for information about the application designer. When users tap the

"Home" button, they will be presented with two learning options: 'Alphabet' and 'My Body.' The 'Alphabet' option contains material about the shape and how to pronounce letters in English.

In contrast, 'My Body' contains learning about body parts, pictures, and how to pronounce them in English. After selecting one of the categories, the application will display the following screen according to the preferred option. Next, when the user taps the 'Alphabet' button, the screen will display the letter A, and the user can choose the letter they want to learn.

Likewise, with the 'My Body' option, users can tap on the image of the body part on the screen, and the application will display the image of the body part along with how to pronounce it in English and Indonesian. The "Help" button provides instructions for using the application, while the "About" button provides contact information for users who need it. This Android-based English learning media application was developed using the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) model, which offers a structured approach to creating interactive and effective educational content. With a user-friendly design, this application aims to improve students' English skills in a fun and accessible way.

The development stage begins with the creation of an initial product, then expert validation (expert review), which will be used as revision material, and a trial accompanied by revisions to produce the final product. Development is carried out by realizing the design of an Android-based English learning media product that was designed in the previous stage to make an initial product. The results of the initial product design can be seen below:



Figure 2. Splash Screen View

After the initial display or splash screen appears, users can start using this application by tapping the 'START' button. Then, a layer display will appear as below, with 'Alphabet' and 'My body' buttons for users to choose to learn.



Figure 3. Home Menu Display

Users are free to choose whether to learn the 'Alphabet' first or 'My body' because each choice will display a different screen according to the choice tapped by the user.



Figure 4. Alphabet Menu Display

Then, suppose the user taps the 'Alphabet' option. In that case, a screen display like the one above will appear, showing the letters A. Users are free to choose which letters to learn by tapping one of the letters, and the following screen display will appear, accompanied by the pronunciation of the letters in English and Indonesian.

The One Click English app was created to assist pupils in identifying the various parts of the human body and pronouncing the English alphabet. Using interactive application-based learning methodologies, the material's design is tailored to the kindergarten curriculum to guarantee active student participation. The application's primary features include a splash screen with instructional graphics, a main menu with two learning options (My Body and Alphabet), and an auxiliary menu with an application usage guide. The application design is founded on the findings of a thorough requirements study to ensure that the content offered is appropriate for early childhood pupils' cognitive development. Materials, media, and design experts developed and verified the application prototype during the development phase.

The content's curricular relevance, the media design's quality, and the appropriateness of the used learning methodologies were all evaluated as part of the

validation process. According to the expert evaluation's findings, this application is of exceptionally high quality, receiving high marks for its content, graphics, usability, and kid-friendly layout. Three key indicators – material relevance, material substance, and strategic pedagogy – were evaluated favorably in subject matter experts' validation of the "One Click English" learning media product. The following graph illustrates the product's superiority in assisting group B pupils at Perintis II Kindergarten with their English language acquisition, based on the average evaluation obtained in each of these indicators:

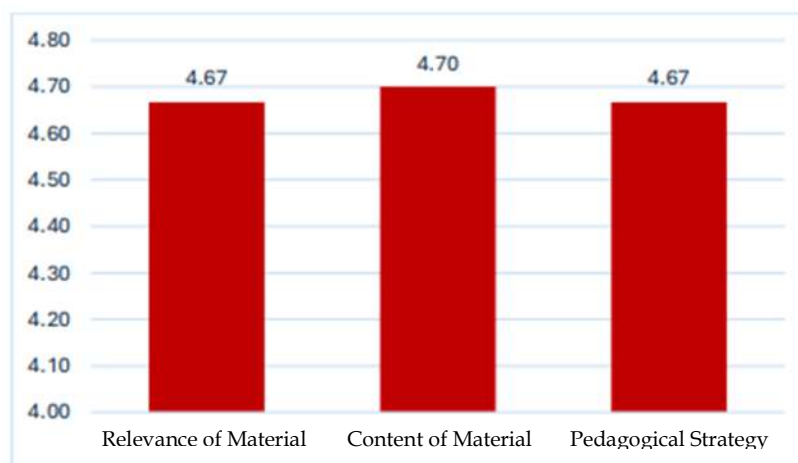


Figure 5. Product Excellence

The content in this learning medium is highly relevant to the curriculum and the learning requirements of the students, as indicated by the material relevance indicator's average score of 4.8 out of 5. According to material specialists, the chosen topic is highly pertinent to kids' English growth, particularly when learning fundamental terminology like the alphabet and body parts. The One Click English application's content is comprehensive and in-depth, covering all facets required for basic comprehension of English, according to the product's average content indication score of 4.7 out of 5. According to material specialists, the information was correct, rational, and methodically organized, making it simpler for pupils to follow and comprehend the lectures.

With an average score of 4.9 out of 5, the pedagogical strategy indicator shows that the method used in this learning medium successfully promotes early childhood learning. This application's interactive, game-based pedagogical approach might boost students' interest and engagement in learning. According to material experts, this approach aligns with the active learning concepts advised in early childhood education. With an average score of 4.8 out of 5 on all three metrics, the One Click English learning materials are generally extremely high quality, according to validation by subject matter experts. This high degree of validity suggests that using this learning resource to help group B pupils at Perintis II Kindergarten become more proficient in English vocabulary is both possible and beneficial.

According to media experts' validation results, the "One Click English" learning media product performed exceptionally well on four key metrics: text, images, technical

quality, and usability. The product's good quality and readiness for use in teaching English to group B pupils at Perintis II Kindergarten are indicated by the average assessment obtained in each of these indicators. The following graph displays the validation results:

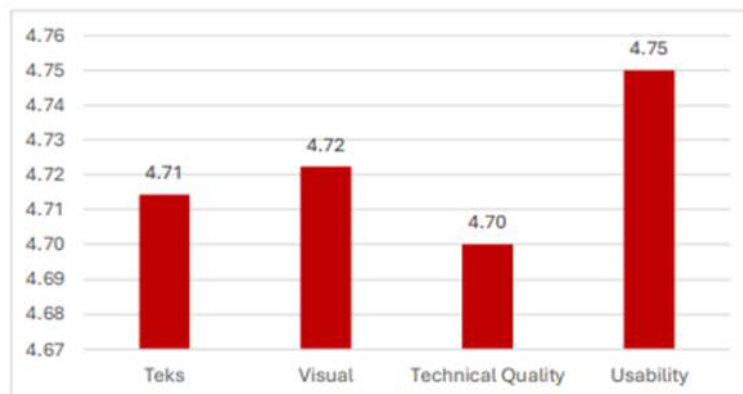


Figure 6. Validation Result

With an average score of 4.71 out of 5, the One Click English application's text indication shows that the text is prominent, simple to grasp, and appropriate for young learners. An appealing visual presentation that aligns with children's interests, as indicated by the visual indicator's average score of 4.72. The application's technical quality score, which considered system dependability, reaction time, and usability, was 4.70. With the highest score of 4.75 for the usability indication, this program is exceptionally user-friendly for parents, instructors, and kids. According to media experts' validation, One Click English has excellent overall quality, with an average score of 4.72. This suggests that the program is helpful in helping group B pupils at Perintis II Kindergarten improve their vocabulary grasp of English.

Four key indicators—learning media characteristics, activity design, learning media phases, and media display design—were evaluated exceptionally well in the design experts' validation findings of the "One Click English" product. This product has an excellent design and is prepared for use in teaching English to group B pupils in Perintis II Kindergarten, according to the average evaluation obtained in each of these factors. The following graph displays the findings:

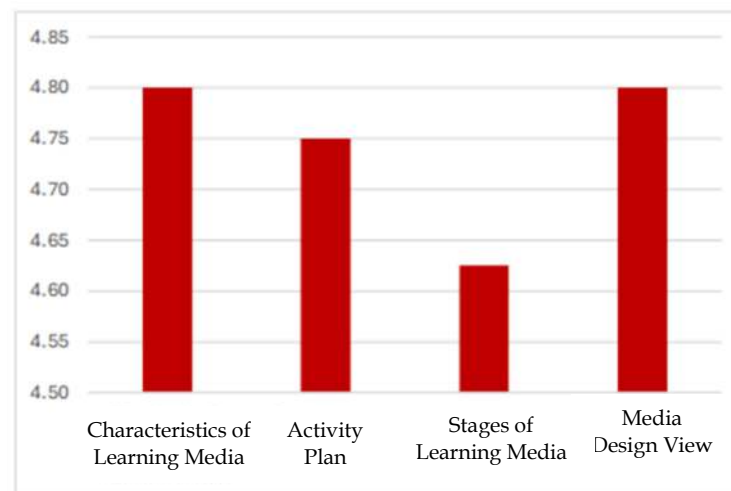


Figure 7. The Average Value of Design Factors

With an average score of 4.80 out of 5, the learning media characteristic indication shows that this material is highly appropriate for young learners. With an average score of 4.75 for the activity design indication, the planned activities may motivate students to participate actively. The learning media stage indicator's average score of 4.63 suggests that the resources are organized methodically and logically. With the highest score of 4.80, the media display design indication demonstrated an eye-catching and intuitive presentation. With an average score of 4.75, the validation by design experts revealed extremely excellent quality overall, suggesting that this medium successfully enhances group B kids' grasp of English vocabulary at Perintis II Kindergarten.

The "One Click English" product has been validated by three different groups of specialists: material experts, media experts, and design experts. The overall results indicate that the product is exceptionally high quality and can be used as a learning tool. The following graph displays the findings:

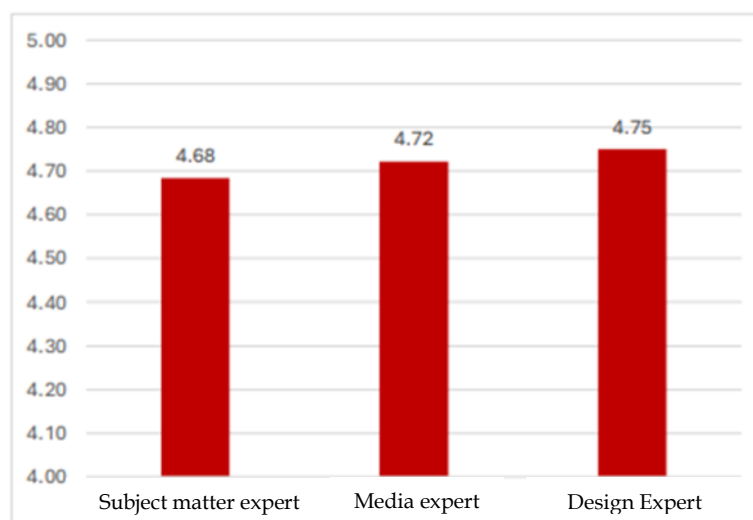


Figure 8. Results of the Validation of Materials, Media Experts and Design Experts

The substance and relevance of the material are highly influenced by the learning objectives and demands of students, as indicated by the average rating of 4.68 out of 5 given by material experts. The application's content, graphics, technical quality, and usability were rated very good by media experts, who gave it an average grade of 4.72, indicating that it is both practical and straightforward for students. With an average grade of 4.75, design experts gave the learning media, activity design, stages, and display design the highest rating, indicating that they are all excellent and visually appealing. The excellent ratings from all three expert categories show that this product is ready to use and should successfully and efficiently help pupils become more proficient in English vocabulary.

After the prototype was validated, the application was tested at Perintis II Kindergarten during the implementation phase. Before implementation, the instructor ensured the program was correctly installed on the students' devices and gave them usage instructions. Additionally, students were ready to use the program by providing their devices were prepared. The teacher instructed the class to begin learning by choosing their resources, such as Alphabet, which teaches the pronunciation of letters A-Z and provides examples of English words, or My Body, which teaches the names of body parts in English through pictures and audio. A pre-test and post-test were also included in this study to gauge how well the pupils had learned the English vocabulary. According to the evaluation findings, students' comprehension of English vocabulary improved when they used the One Click English program, as seen by the significant increase in their scores.

The One Click English app has shown itself as a valuable and engaging educational tool that enables students to study outside the classroom. This application's interactive features and user-friendly layout make it easier for teachers to provide instruction. Additionally, this program is simple to use on Android smartphones and gives instructors and students the freedom to conduct learning at any time and from any location. According to the final assessment, this application not only helped pupils become more proficient in English but also made learning enjoyable and met Perintis II Kindergarten's educational requirements.

A comparison of pretest and post-test results shows a significant increase in students' English vocabulary mastery after using the "One Click English" application. The results of the descriptive statistical analysis using SPSS are as follows:

Table 1. Descriptive Statistical Analysis

| | N | Range | Min. | Max. | Mean | Std. Deviation |
|----------------|----------|--------------|-------------|-------------|-------------|-----------------------|
| Pretest Score | 16 | 80 | 20 | 100 | 55.63 | 25.025 |
| Posttest Score | 16 | 20 | 80 | 100 | 96.87 | 7.042 |
| Valid N (list) | 16 | - | - | - | - | - |

The descriptive statistical analysis results using SPSS software show the characteristics of the pretest and posttest scores in a sample of 16 students. For the pretest scores, the observed range ranged from 20 to 100, with a minimum score of 20 and a

maximum score of 100. The average pretest score was 55.63, with a standard deviation of 25.025, indicating a significant variation in students' initial abilities before the intervention using the One Click English application. Meanwhile, the post-test scores were in the range of 80 to 100, with a minimum score of 80 and a maximum score of 100. The average post-test score was 96.87, with a relatively low standard deviation of 7.042. The significant difference between the average pretest and posttest scores indicates a substantial increase in students' English vocabulary mastery after using the application.

Before the application was used, the average pretest score was 55.63, indicating that students' initial understanding of English vocabulary was still relatively low. This figure reflects their basic abilities before receiving learning interventions through technology-based media. After using the "One Click English" application in the learning process, the posttest results showed a significant increase, with an average score of 96.88. This average increase of 41.25 points indicates that the application helps students improve their vocabulary mastery and substantially accelerates the learning process. The comparison of pretest and posttest is shown in the following graph:

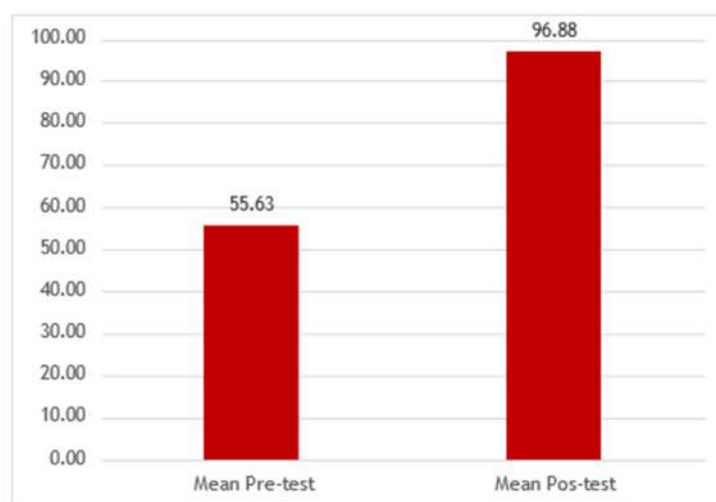


Figure 9. Comparison of Pretest and Posttest

These results indicate that the use of technology-based learning media such as "One Click English" can significantly positively impact student learning outcomes. In addition, this spike in value confirms that the application can make learning more effective and efficient so that students can achieve a higher level of understanding in a relatively short time.

Teachers' reactions to the One Click English program revealed differing outcomes in three key areas—visual communication, operational, and content presentation. The program had an average score of 3.83 in the content presentation category, meaning that most instructors thought the information was easy to comprehend, supported students' self-directed learning, and made learning more engaging. Instructors thought the offered material was pertinent and aligned with students' requirements. The program had an

average score of 3.70 in the operational category, indicating that it is very user-friendly regarding how to launch and navigate it. The teachers also thought the provided usage instructions were clear.

In contrast, the application scored an average of 3.50 in the visual communication category. Despite having the lowest score out of the three, it demonstrates that the application's initial look, the letters' legibility, and the appropriateness of the picture size, color, and quality are all excellent. The teachers responded well to this program overall, expressing more appreciation for the material offered; nonetheless, they recommended enhancements to the visual and operational communication elements.

The assessment data on the three primary features are shown in the graph below to help with comprehension of the teacher response questionnaire findings on the One Click English application:

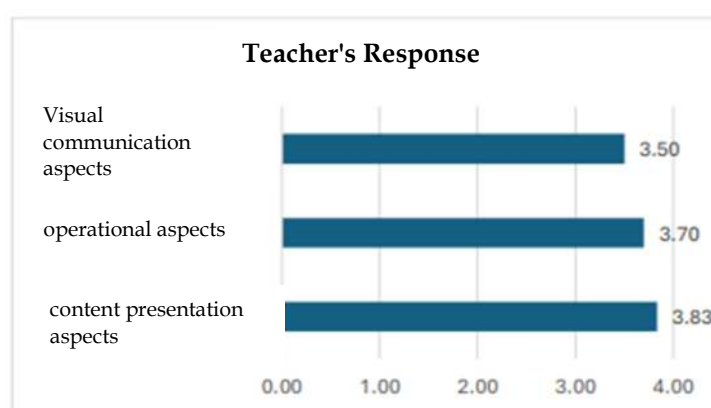


Figure 10. Teacher's Response

On the other hand, parents' answers to the One Click English app revealed comparable findings, with judgments differing in three key areas. The application received an average score of 3.67 for content presentation, meaning that most parents thought the content was beneficial for their kids in understanding the learning materials, encouraging self-directed learning, and making learning more engaging. Parents thought the information was pertinent and helpful for the kids' education. With an average score of 3.50 for operational characteristics, the program was quite user-friendly for kids in terms of starting down and navigating. Parents also said the application's usage instructions were obvious.

However, the application received an average score of 3.58 for visual communication, meaning that parents thought the application's initial appearance, the letters' readability, and the appropriateness of the images' size, color, and resolution were all good. Parents believe the visual communication component is crucial to improving the application's appeal and user comfort, even though this value is lower than the content presentation component. Overall, even though parents responded favorably to the application, there is still a need for development, particularly in visual communication and operation, to enhance the children's learning experience. The graph below displays the evaluation results data on the three primary aspects:

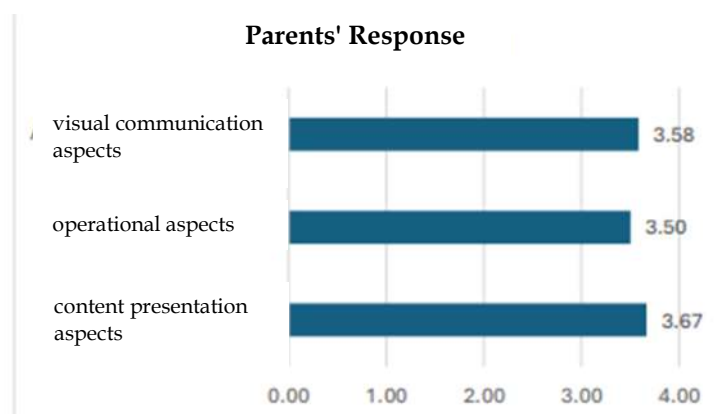


Figure 11. Parents' Response

Each of the three aspects—visual communication, operations, and content presentation—has an average evaluation of 3.58, 3.50, and 3.67, respectively, as seen in the graph above.

Discussion

One Click English Learning Media Design

Field studies indicate that conversation and assignment methods are standard practices in English learning but have limitations due to the dependence on teacher presence. Analysis of student characteristics shows that they need the help of learning media to facilitate understanding of the material. Teacher analysis highlights their limitations in providing intensive guidance to each student.

The final product design phase focuses on the storyboard of the One Click English application, showing features such as a splash screen, learning options (Alphabet and My Body), help buttons, and information about the application designer. This reflects the effort to create a user-friendly application and the needs of students and teachers in the context of English learning at Perintis II Kindergarten. Thus, developing Android-based learning media is very important to improve the learning experience and facilitate student engagement in class.

One Click English Learning Media Profile

The One Click English Learning Media Profile shows an application implemented to improve students' English skills with a structured approach through the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation). The development stage of this application consists of several steps, starting with the creation of an initial product, which then involves expert validation and testing to improve the application until it reaches its final form.

Validation by content experts showed very positive assessments of the application's relevance, content, and pedagogical strategies. Content experts assessed that the application

content was appropriate to the curriculum and student's needs, and the learning strategies used effectively supported early childhood learning. Validation by media experts showed excellent assessments of the application's text, visuals, technical quality, and usability.

This application is considered high quality and ready to be used in English learning. Meanwhile, validation by design experts showed an excellent assessment of the characteristics of learning media, activity design, stages of learning media, and media display design. Overall validation results show that the OneClick English application is feasible and effective for improving English vocabulary mastery of group B students at Perintis II Kindergarten. With a very high assessment from various experts, this application is expected to enhance the English learning process in kindergarten effectively.

The efficiency of One Click English Learning Media

The results of the One Click English learning media efficiency evaluation showed a significant increase in students' English vocabulary mastery. The implementation stage of this application involved teacher and student preparation and the use of the product in learning. Before use, the pretest results showed a variation in students' initial abilities, with an average score of 55.63, indicating a diverse initial ability level among students.

However, after using the application, the post-test results showed a fairly drastic increase, with an average score reaching 96.88, indicating that almost all students achieved an excellent mastery level. A comparison of the pretest and post-test results confirmed the effectiveness of the application in improving English vocabulary understanding, with an average increase of 41.25 points.

The results of teacher responses to the application showed positive assessments, especially in content presentation. At the same time, parent responses also showed good perceptions of the application, although there was a need for improvement in the operational and visual communication aspects. This study consistently confirms that technology-based learning media such as One Click English have great potential to improve student learning outcomes in English and emphasizes the importance of integrating technology in modern education to achieve more optimal results.

The One Click English application provides high efficiency in learning English for PAUD students by utilizing time outside the classroom to study independently. This application allows students to access learning materials anytime and anywhere, so formal class schedules do not limit them. Using time outside the classroom is very important for PAUD students because it allows them to learn in a more relaxed and comfortable atmosphere, which can improve their concentration and understanding of the material being studied.

In addition, One Click English is designed with a simple and easy-to-understand interface for children so they can use it with minimal assistance. However, the presence of parents as companions during the use of the application can provide moral support and help children understand more complex material. Thus, the learning process becomes more

effective because students get direct assistance from parents, who can monitor their child's learning progress in real time.

The efficiency of using this application also lies in the interactive and fun learning method. One Click English combines attractive images, clear audio guides, and bilingual support in English and Indonesian. This method makes it easier for children to recognize and pronounce the alphabet and the names of body parts and makes the learning process more enjoyable and not boring. Thus, PAUD students can utilize time outside the classroom to learn English optimally, supported by a conducive learning environment and active parental involvement. According to the theory discussed by Yusuf (Setiani, 2018), Android also has several weaknesses. To overcome the shortcomings of Android, guidance from teachers, parents, or guardians of students is an effective evaluation tool when students operate the One Click English application to avoid using Android for things unrelated to learning or other negative things.

D. Conclusion

Based on the discussion that has been presented, this study produces significant findings in three main aspects related to the One Click English learning media. First, at the learning media design stage, it was found that the design of this Android-based learning media was based on a comprehensive analysis of the needs of students and teachers in the context of English learning at Perintis II Kindergarten. This indicates that this application is designed by considering students' characteristics and the challenges teachers face in providing effective learning.

Second, the One Click English learning media profile shows that this application has undergone a structured development process using the ADDIE model, with very positive validation results from various experts, both in terms of material content and design and technical aspects of the application. After validation from several experts, the One Click English learning media profile is based on the needs of students at Perintis II Kindergarten, where students need interactive learning media to understand daily learning.

Third, the evaluation of the efficiency of the learning media showed a significant increase in students' English vocabulary mastery after using this application, which was supported by the results of the pretest and posttest, as well as positive responses from teachers and parents. In conclusion, One Click English is an effective learning aid in improving students' learning outcomes in English. It reflects the great potential of technology in modern education to achieve more optimal results overall. One Click English received a positive response from parents of students because in its operation, students always receive guidance from teachers (at school) and parents (at home), so it can be confirmed with validity that the use of this learning media is very good and guided. Thus, using technology-based learning media such as One Click English can be an efficient and effective solution for improving educational institutions' English learning process.

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