

Research Article

Mobile Application in Learning English Grammar for Primary School Students

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Abstract: Computer-assisted language learning (CALL) has been shown to be an effective addition to second language education amongst students. Furthermore, following the rapid advancements in technology in the past decade, smartphones are now considered a necessity for modern day living allowing for Mobile-assisted language learning (MALL). Thus, a textbook application that harnesses the availability of technological devices present can bridge challenges faced in learning second languages. Traditional textbooks lack the ability to play crucial audio or show additional visuals that could prove useful for the student's comprehension of the subject. Therefore, this paper explores the use of mobile applications as a tool for enhancing primary school students' learning of English grammar. A textbook application was created using Android Studio-based applications which followed closely the ADDIE framework. The research was conducted on a group of primary school students. A qualitative design was employed in this study with the use of unstructured interviews and observations to identify the effectiveness of the application. The result showed that the participants were more enthusiastic and focused when using the application in learning grammar and based on the brief interviews conducted, all participants expressed their enjoyment in using the application as a tool to further learn the English grammar. It can be concluded that using mobile applications in learning English grammar helps in building interactive language learning for students in primary school. It is also marketable, economically feasible to a large number of students and has great potential in facilitating language learning, particularly in grammar.

Keywords: Android Studio application, ADDIE framework, Computer-Assisted Language Learning (CALL), mobile application, Mobile-Assisted Language Learning.



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1. INTRODUCTION

The use of existing and new technology to aid education has always been a pursuit of institutions and educators alike. These can be seen through the various implementations and methods of incorporating computers in pedagogy. There are many methods that can be used by both teachers and learners in learning a language. Computer-Assisted Language Learning (CALL) is known to be one of the methods that has been discussed since the 1980s where teachers have been experimenting with implementing computers in their teaching (Carrier, 1985). Al-Ruz and Khasawneh (2011) believed that the computer can help language learners to enhance their language learning and achievement due to its ability to provide visual input. Furthermore, a study by Tafazoli et al. (2020) has shown there are

many strengths to implementing CALL in classrooms, from providing expanded ranges of resources, enhancing language learning, enabling authentic materials and interactions with native speakers, improving student motivation as well as promoting independent learning. In addition, Lodhi (2019) found that utilization of CALL technologies improved students' digital literacy. Another study by Namaziandost et al. (2022) found that administering CALL enhanced digital literacy as well as led to improved problem-solving abilities, boosted learning satisfaction, and improved the student's self-regulated learning. Nowadays, the trend of teaching and learning has now shifted from CALL to Mobile-Assisted Language Learning (MALL) (Harun & Hussin, 2020).

Due to advances in technology, mobile phones can now serve another purpose other than communication - learning. This allows for MALL which as stated by Dağdeler (2023), found that students had more positive attitudes towards learning as they could interact with smartphones. Furthermore, his research showed that the gamification of learning led to increase motivation in learning especially in vocabulary. Arvanitis and Krystalli (2021) highlighted that these portable devices allow users to access educational resources that are available online and not restricted to the input provided by teachers and traditional textbooks. Other than surfing the Internet for information regarding language, there are some mobile applications developed that focus on learning language, such as DuoLingo. A study conducted by Al Fadda and Alaudan (2020) shows that the language students in a TESOL classroom were found to be more interested in learning the English language by using DuoLingo, compared to the traditional language classroom due to the fact that they are free to express their thoughts, other than that they can improve their language skills such as vocabulary and pronunciation further. These applications can provide users a flexible, personalized, and fun approach to learn the language and further motivate them to master the language. Thus, in aiding language learning for primary school students that focuses on the grammatical aspect of the language, a mobile application was developed based on the Standard 3 curriculum.

2. METHOD & MATERIAL

In developing an application that serves its purpose, a few procedures were carried out. In this case, the procedures were based on the ADDIE framework. This framework is a well-known instructional design framework to create training materials and courses and according to (Spatioti et al., 2022), many educational designers and training programmers use the ADDIE model as a teaching model when creating educational and training programmes. ADDIE stands for the five fundamental elements of this approach for the creation of the learning experience: Analysis, Design, Development, Implementation and Evaluation.

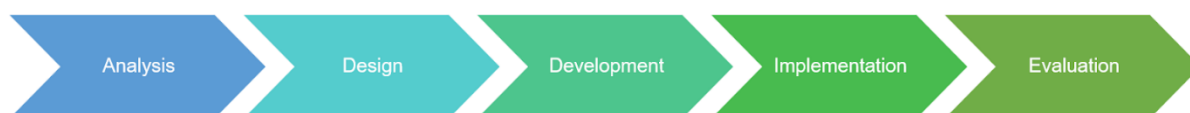


Figure 1. ADDIE framework

- a. **Analysis** - Analysis an issue to assist the Primary 3 students to learn English grammar more effectively.
- b. **Design** - Design the application using multimedia to create the content, videos and quizzes.
- c. **Development** - The application was developed by using Android Studio software and it was adapted based on standard 3 curriculum.

- d. **Implementation** - The application of learning English grammar succeeded and was downloaded in an Android phone.
- e. **Evaluation** - A survey was conducted where several participants were asked to use the mobile application. Feedbacks were given.

The software used to develop this mobile application is Android Studio Dolphin. As stated by (Ejiyi et al., 2021) android studio is the official Integrated Development Environment (IDE) for the Android App development where it is allowed to create an application according to the purposes. In this case, a mobile application for educational context using the ADDIE framework.

The research method conducted in this study is a qualitative method utilizing unstructured interviews and observations to identify the effectiveness of a mobile application that was designed and made for the primary school students based on the standard 3 curriculum. Once the application is made successfully, the participants were given the opportunity to use it. Observations were made and the participants were interviewed informally regarding their opinions on the application and their feedback on how the application can be improved.

3. FINDINGS AND DISCUSSION

All the participants showed that they preferred using the android app compared to learning via textbooks. The increased interest expressed by the participants when using the app shows that it can be an effective tool to help in learning English grammar. These results echo the findings by Dağdeler (2023) where the use of android apps or MALL increased the interest of students. Furthermore, the participants were more focused and motivated to use the app, including when answering the questions within the app. This showed that utilizing MALL increased students' focus and motivation mirroring findings from Al Fadda and Alaudan (2020). Using the android app can also assist in improving the reading and listening skills of students as the app combines audio visual input with the materials traditionally found in textbooks. Observations showed that students tended to overlook instructions and proceeded to answer the questions immediately. However, when a button to play an audio clip of the instructions was present, the student was more likely to read the instructions while listening to them first before answering the questions. Some students also played the audio clip a few times before attempting the questions. A mobile app also allows for audio visual feedback to be given when the student answers questions correctly. Observations of participants exhibited increased motivation to continue answering questions when the app gave positive feedback in the form of an audio chime for correct answers.

4. CONCLUSION

To sum up, the development of a mobile language learning application has the potential to revolutionize language learning and teaching. According to this research, mobile learning applications can offer learners a flexible, practical, and personalized learning environment. The availability of such applications could significantly increase access to language learning opportunities for people all around the world given the rising popularity of smartphones. In order to address the rising demand for language instruction, more research and development into mobile language learning applications are much recommended.

Acknowledgments: We thank the students and teachers who have contributed and participated in this study.

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