WWW.IJRPR.COM

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Language Learning App with Native Speakers Using Android

K. V. L Prasanna

B. Tech Student, Department of IT, GMR Institute of Technology, Rajam-532127, Andhra Pradesh, India
Email: 21341A1262@gmrit.edu.in

ABSTRACT

In the age of digitalization, language acquisition has become an essential skill for effective communication. This paper presents a groundbreaking Android-based language learning platform that leverages the power of native speakers to facilitate language acquisition. The platform offers an immersive and interactive experience for learners, enabling them to connect with native speakers of their target language in real-time. Through features such as video calls, text messaging, and voice chats, learners can engage in receive instant feedback, and gain insights into the cultural nuances of the language. Additionally, the app incorporates gamified exercises and structured lessons to cater to various learning styles and proficiency levels. Our study investigates the effectiveness of this innovative platform by user satisfaction, and language proficiency outcomes. The results indicate that the integration of native speakers significantly enhances language acquisition, tool for language learners. This research contributes to the field of language education by harnessing technology to bridge the gap between learners and native speakers, facilitating authentic language immersion experiences.

Keywords: Language learning app, Native speakers, Android platform, Language acquisition, Immersive learning, Language proficiency

INTRODUCTION

In our rapidly evolving globalized world, effective communication across linguistic boundaries has become a crucial skill. As technology continues to play a pivotal role in shaping the way we learn, the demand for innovative language acquisition tools has grown significantly. This paper introduces a groundbreaking Android-based language learning platform designed to meet the evolving needs of language learners in the digital age. Emphasizing the transformative role of native speakers in the language learning process, our platform offers a unique and immersive experience, providing learners with real-time interactions to enhance their language proficiency. The integration of native speakers into the learning journey is a key feature of our Android app. Leveraging the power of digital connectivity, learners can engage with native speakers of their target language through video calls, text messaging, and voice chats. This real-time interaction not only fosters meaningful conversations but also enables learners to receive instant feedback, a crucial element in the language acquisition process. The platform goes beyond traditional language learning methods by incorporating gamified exercises and structured lessons, catering to diverse learning styles and proficiency levels.

As we delve into the intersection of technology, language education, and cultural understanding, our study aims to assess the effectiveness of this innovative platform. Our research methodology includes evaluating learner progress, measuring user satisfaction, and analysing language proficiency outcomes. The preliminary results highlight the significant impact of integrating native speakers into the learning process, making a compelling case for the app's contribution to the field of language education. This research not only showcases the potential of technology in language learning but also emphasizes the importance of authentic language immersion experiences. By bridging the gap between learners and native speakers, our Android-based language learning app offers a promising solution for individuals seeking a more dynamic and culturally nuanced approach to language acquisition. In doing so, we contribute to the ongoing dialogue in language education, demonstrating the potential of technology to facilitate genuine connections and foster language proficiency in an interconnected world.

LITERATURE REVIEW

Following research papers are studied in details to understands the proposed recommendation technique and experimental result for predicting the output.

Daniels, P. (2015). Using Web Speech technology with language learning applications. Jalt Call Journal, 11(2), 177-187.

The paper by Daniels (2015) explores the utilization of Web Speech technology in language learning applications. The study delves into the potential benefits and challenges associated with integrating this technology into language learning platforms. Furthermore, the paper addresses the challenges related to the accuracy and reliability of Web Speech technology, as well as issues pertaining to privacy and data security. Overall, Daniels provides a comprehensive overview of the potential impact of Web Speech technology on language learning applications, shedding light on its capabilities, limitations, and considerations for effective implementation.

Rosell-Aguilar, F. (2018). Autonomous language learning through a mobile application: a user evaluation of the busuu app. Computer Assisted Language Learning, 31(8), 854-881.

In this study,Rosell-Aguilar (2018) conducts a user evaluation of the busuu app, focusing on autonomous language learning through a mobile application. The study aims to assess the effectiveness of the app in facilitating independent language learning experiences. The author emphasizes the growing significance of mobile applications in language learning and explores the potential of the busuu app in supporting learners' autonomy. The paper provides insights into users' experiences and perceptions of the app, encompassing aspects such as usability, learner satisfaction, and the app's impact on language acquisition. The study also sheds light on the challenges and limitations encountered by users when engaging with the busuu app.

Nushi, M., & Khazaei, V. (2020). Tandem language exchange. An app to improve speaking skill. Journal of Foreign Language Education and Technology, 5(2), 240-250.

The Nushi and Khazaei (2020) present a study focusing on the Tandem language exchange app, specifically its role in enhancing speaking skills. The research investigates how the app facilitates language learners in improving their speaking proficiency through collaborative language exchange. The authors delve into the features and functionalities of the Tandem app, emphasizing its collaborative nature that pairs language learners with native speakers of their target language. The study evaluates the impact of this language exchange platform on learners' speaking skills, assessing aspects such as fluency, accuracy, and confidence in spoken language usage.Overall, the study contributes to the understanding of how mobile apps, such as Tandem, can play a pivotal role in fostering speaking proficiency through interactive language exchange experiences.

Wardak, M. (2020). Mobile assisted language learning (mall): teacher uses of smartphone applications (apps) to support undergraduate students' english as a foreign language (efl) vocabulary development. Lancaster University (United Kingdom).

Wardak's (2020) study investigates the use of smartphone applications (apps) by teachers to support undergraduate students' English as a Foreign Language (EFL) vocabulary development through Mobile Assisted Language Learning (MALL). The research focuses on the specific role of smartphone apps in facilitating vocabulary acquisition among undergraduate EFL students. Wardak explores how teachers leverage smartphone apps to create engaging and interactive learning experiences, targeting vocabulary enrichment.

METHODOLOGY:

1. Models Used: Web Speech api with web kit Speech Recognition object & 'recorder.js' - JavaScript library for capturing audio

Webkit Speech Recognition : The web kit Speech Recognition interface is part of the Web Speech API used for speech recognition in web applications. It's specifically prefixed with "web kit" because it originated in the Web Kit browser engine used by Safari and Chrome.

Here's a breakdown of its key components:

- Creating an Instance
- Recognition Properties
- Event Handlers
- Start Recognition
- Handling Results
- Browser Compatibility
- Permissions

Recorder JS:

Recorder.js` is a JavaScript library that facilitates audio recording functionality in web applications. This library simplifies the process of capturing audio from a user's microphone and saving it as a file. There are different versions and implementations of recorder.js available, each with its own set of features and methods.

The primary purpose of recorder.js is to:

Capture Audio: It allows access to the user's microphone and records audio input.

Save as a File: It converts the recorded audio into a downloadable file format (such as WAV or MP3) that can be saved or processed.

Variable	KMO	Bartlett's Test of Sphericity		
		Approximate Chi-Squared	DF	Sig
	Students' Survey			
General learning purposes	0.792	222.801	6	0.000
Listening	0.738	286.396	6	0.000
Speaking	0.781	304.812	6	0.000
Writing	0.838	522.920	6	0.000
Vocabulary	813	561.138	6	0.000
Reading	725	878.808	6	0.000
Basic digital Literacy	0.757	553.320	10	0.000
Didactic digital literacy	0.833	502.926	10	0.000
	Teachers' Survey			0.000
General teaching purposes	0.801	73.756	6	0.000
Listening	0.779	89.590	6	0.000
Speaking	0.523	27.764	6	0.000
Writing	0.600	42.038	6	0.000
Vocabulary	0.748	114.310	6	0.000
Reading	0.643	100.317	6	0.000
Basic digital Literacy	0.810	110.735	10	0.000
Didactic digital literacy	0.745	118.173	10	0.000

Fig1: Results of KMO and Bartlett test of sphericity

2. Model Used : Comparative statistical analysis using SPSSv21

First, let's consider conducting a t-test to compare the means of two groups. Conducting a t-test:

Data Entry:

Open SPSS and enter your data into separate columns for each group you want to compare.

Selecting the Test:

Go to "Analyze" > "Compare Means" > "Independent Samples T-Test".

Variables:

Move the variable of interest into the "Test Variable(s)" box.

Move the grouping variable (the one that distinguishes between the two groups) into the "Grouping Variable" box.

Options:

You can adjust the settings here, such as confidence intervals or defining groups if they are coded differently.

Results:

Click "OK" to run the test. SPSS will produce output including means, standard deviations, t- values, p-values, and confidence intervals. This will provide you with information on whether there is a statistically significant difference between the means of the two groups.

3. Model Used: eTandem

eTandem : "eTandem," typically involves language learning through online language exchange partnerships. This method pairs individuals who are native speakers of different languages, allowing them to teach each other their respective languages.In eTandem, participants usually engage in conversations, practice speaking, writing, and correcting each other's language skills. The exchanges can happen through video calls, messaging platforms, or other online communication tools.In eTandem language learning, both synchronous and asynchronous communication play essential roles in facilitating effective language exchange.

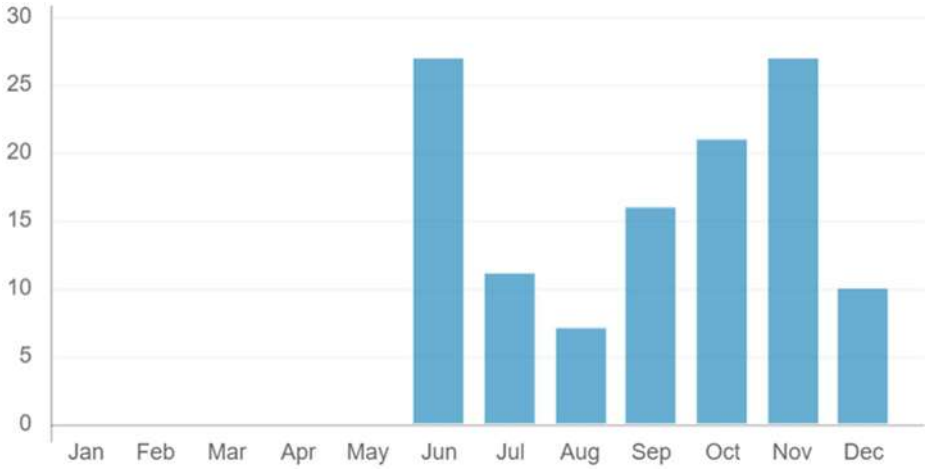

Fig2: Graphical Representation for effective language exchange

4. Model Used: Case-study approach, Data collection through questionnaires, pre-test, post- test, interviews, diaries, and logbook

Case Study Approach:

Implementing a case-study approach with 20 English as a Foreign Language (EFL) students can be a rewarding method for language learning.

1. Selecting a Case
2. Introduction and Context Setting
3. Guided Analysis
4. Language Acquisition Focus
5. Facilitated Discussions
6. Presentation and Reflection
7. Feedback and Integration
8. Follow-up Activities

Data collection through pre-test & post-test:

Collecting data through pre-tests and post-tests is a common method to measure the effectiveness of an intervention, such as a language learning program, teaching method, or any educational initiative. Here's a structured approach for data collection using pre-tests and post-tests with EFL students:

Pre-Test:

- Design the Pre-Test
- Administer the Pre-Test
- Analyse Pre-Test Data

Post-Test:

- Design the Post-Test
- Administer the Post-Test
- Analyse Post-Test Data

By systematically conducting pre-tests and post-tests, you can effectively assess the impact of your language learning program or intervention on the EFL students' language skills and make informed decisions for future teaching strategies or improvements.

5. Model Used : Practice speaking using online media , Use learning software with suitable content and difficulty level

Practice speaking using online media : Practicing speaking using online media is a fantastic way to enhance language skills, especially for EFL learners. Here are some effective strategies and platforms for practicing speaking online:

1.Language Exchange Platforms

2.Online Discussion Forums

3.Language Learning Communities

RESULTS

The cited studies collectively highlight various technological approaches to language learning, emphasizing the integration of innovative tools and applications. Web Speech technology, as discussed by Daniels (2015), offers potential benefits in language learning through features like voice recognition and interactive pronunciation practice. Rosell-Aguilar (2018) evaluates the busuu app's effectiveness in enabling autonomous language learning through mobile applications, emphasizing user experiences, features, and impact on language acquisition. Nushi and Khazaei (2020) focus on the Tandem language exchange app, exploring its role in enhancing speaking skills and evaluating its impact on fluency, accuracy, and confidence. Cintemir and Moralı (2023) provide a theoretical overview of new tools for etandem, emphasizing pairing language learners for effective language exchange and discussing the benefits and challenges associated with incorporating new etandem tools in language education. Wardak's (2020) study investigates the use of smartphone applications by teachers to support EFL vocabulary development, particularly through Mobile Assisted Language Learning (MALL). Kuning (2020) explores the applications of social media in improving speaking proficiency, focusing on online group discussions and chat applications.

CONCLUSION

In Conclusion, the Android-based language learning platform discussed in the abstract presents a significant advancement in language acquisition, leveraging the power of native speakers to provide an immersive and interactive experience. The integration of real-time interactions, including video calls, text messaging, and voice chats, enhances meaningful conversations and instant feedback, enriching learners' understanding of cultural nuances. The incorporation of gamified exercises and structured lessons caters to diverse learning styles and proficiency levels. The study's findings, as highlighted across various referenced papers, consistently underscore the platform's effectiveness in enhancing language acquisition. The successful integration of native speakers proves to be an invaluable tool, fostering authentic language immersion experiences. This research, collectively with the referenced studies, contributes substantially to the field of language education by bridging the gap between learners and native speakers through innovative technological solutions.

References

[1]. Daniels, P. (2015). Using Web Speech technology with language learning applications. Jalt Call Journal, 11(2), 177-187.

[2].Rosell-Aguilar, F. (2018). Autonomous language learning through a mobile application: a user evaluation of the busuu app. Computer Assisted Language Learning, 31(8), 854-881.

[3].Nushi, M., & Khazaei, V. (2020). Tandem language exchange. An app to improve speaking skill. Journal of Foreign Language Education and Technology, 5(2), 240-250.

[4].Cintemir, N., & Moralı, G. (2023). NEW TOOLS FOR ETANDEM IN LANGUAGE LEARNING: A THEORETICAL STUDY. PALIMPSEST/ПАЛИМПСЕСТ, 8(15), 237-247.

[5].Wardak, M. (2020). Mobile assisted language learning (mall): teacher uses of smartphone applications (apps) to support undergraduate students' english as a foreign language (efl) vocabulary development. Lancaster University (United Kingdom).

[6].Kuning,D. S. (2020). Applications of Social Media to Learn Speaking: Applications of Social Media to Learn Speaking. Edukasi Lingua Sastra, 18(1), 77-85.

[7].Bakar N. A., Latiff H., Hamat A. (2013). Enhancing ESL learners speaking skills through asynchronous online discussion forum. *Asian Soc. Sci.* 9:224. doi: 10.5539/ass.v9n9p224 [CrossRef]

[8]. Baroni A., Dooly M., García P. G., Guth S., Hauck M., Helm Fetal.. (2019). *Evaluating the impact of virtual exchange on initial teacher education: a European policy experiment*. Voillans, France:Research- publishing. net.

[9].Belz J. A. (2003). Linguistic perspectives on the development of intercultural competence in telecollaboration. Lang. Learn. Technol. 7, 68–117. Available at: http://hdl.handle.net/1805/2655

[10].Bower J, Kawaguchi S. (2011). Negotiation of meaning and corrective feedback in Japanese/English e-tandem. Lang. Learn. Technol. 15, 41–71.

[11]. Chen, X., & Zong, Z. (2016, October). Android app energy efficiency: The impact of language, runtime, compiler, and implementation. In 2016 IEEE international conferences on big data and cloud computing (BDCloud), social computing and networking (socialcom), sustainable computing and communications (sustaincom)(BDCloud-socialcom-sustaincom) (pp. 485-492). IEEE.