

A REVIEW OF THE EFFECTIVENESS OF WHATSAPP AS A LEARNING TOOL IN IMPROVING FOREIGN LANGUAGE LISTENING SKILLS IN INDONESIA

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Abstract. *The rapid advancement in communication and information technologies has presented new avenues for foreign language learning in Indonesia, particularly with the adoption of WhatsApp as an educational tool. This article provides a thorough narrative literature review examining the role of WhatsApp in enhancing foreign language listening proficiency. The process of data collection involved conducting systematic searches for peer-reviewed, fully published, and open-access articles across three major academic databases: Scopus, GARUDA, and Google Scholar, applying precise search strategies and clear inclusion-exclusion criteria. The review concludes that WhatsApp effectively supports the development of listening skills through various approaches, such as utilizing voice notes, distributing structured audio-visual materials, fostering interactive discussions, and encouraging student autonomy. Notable advantages include flexible access to materials, heightened motivation, collaborative learning, and greater student engagement. However, several challenges persist, such as limited access to devices and the internet, as well as varying levels of teacher and student proficiency in using technology. The review also identifies the variety of research methodologies and*

A REVIEW OF THE EFFECTIVENESS OF WHATSAPP AS A LEARNING TOOL IN IMPROVING FOREIGN LANGUAGE LISTENING SKILLS IN INDONESIA

theoretical frameworks used in the studies, recommending further investigation into the integration of WhatsApp with other digital learning methods and platforms. Ultimately, WhatsApp proves to be a versatile and pertinent tool for advancing foreign language listening skills in Indonesia's digital age..

Keywords: *Whatsapp, Listening Skills, Foreign Language, Literature Review, Indonesian Education.*

Abstrak. Perkembangan pesat dalam teknologi komunikasi dan informasi telah membuka peluang baru dalam pembelajaran bahasa asing di Indonesia, khususnya dengan penerapan WhatsApp sebagai alat pembelajaran. Artikel ini menyajikan kajian pustaka naratif yang komprehensif mengenai efektivitas WhatsApp dalam meningkatkan keterampilan mendengarkan bahasa asing. Proses pengumpulan data dilakukan melalui pencarian sistematis terhadap artikel-artikel ilmiah yang telah dipublikasikan secara penuh dan terbuka, yang diambil dari tiga basis data utama: Scopus, GARUDA, dan Google Scholar, dengan menerapkan strategi pencarian yang ketat serta kriteria inklusi dan eksklusi yang jelas. Kajian ini menyimpulkan bahwa WhatsApp efektif dalam mendukung pengembangan keterampilan mendengarkan melalui berbagai pendekatan, seperti penggunaan voice notes, distribusi materi audio-visual yang terstruktur, diskusi interaktif, dan penguatan otonomi belajar siswa. Manfaat utama WhatsApp antara lain akses fleksibel terhadap materi, peningkatan motivasi, pembelajaran kolaboratif, dan keterlibatan siswa yang lebih aktif. Meskipun demikian, beberapa tantangan masih ada, seperti keterbatasan akses perangkat dan internet, serta tingkat penguasaan teknologi yang bervariasi antara guru dan siswa. Kajian ini juga mengidentifikasi keberagaman metodologi penelitian dan kerangka teori yang digunakan, serta merekomendasikan penelitian lebih lanjut mengenai integrasi WhatsApp dengan strategi pembelajaran digital lainnya dan platform pembelajaran. Secara keseluruhan, WhatsApp terbukti menjadi alat yang adaptif dan relevan dalam mendukung keterampilan mendengarkan bahasa asing di era digital Indonesia.

Kata Kunci: Whatsapp, Keterampilan Mendengarkan, Bahasa Asing, Kajian Pustaka, Pendidikan Indonesia.

INTRODUCTION

The rapid development of communication and information technology has had a significant impact on various sectors, including foreign language learning. WhatsApp, originally used for personal communication, now shows great potential as a learning tool for enhancing foreign language listening skills (Ryannor, Karani, & Bungai, 2023; Syairofi, Suherdi, & Purnawarman, 2023). The use of WhatsApp in educational settings is becoming increasingly popular due to its ease of access, flexibility in timing, and supportive features such as voice notes, audio sharing, and interactive discussion forums that facilitate the teaching and learning process (Kartal, 2019; Foo Terng Hoe, Teck Heng Lim, & Boon Yih Mah, 2021).

Mastery of foundational skills plays a crucial role in the success of foreign language learning, with listening recognized as a fundamental basis for the development of other skills such as speaking, reading, and writing. In this regard, WhatsApp serves as a relevant alternative to overcome the limitations of time and space inherent in conventional learning, particularly through its features that enable independent and repetitive listening practice (Fauzi & Angkasawati, 2019). Findings from various experimental studies and systematic reviews indicate that the integration of WhatsApp into the learning process significantly enhances listening outcomes, whether through audio materials, listening logs, or interactive bots (Behforouz & Al Ghaithi, 2024; Tan, Hoe, & Ho, 2019).

Beyond ease of access, WhatsApp also contributes to increasing students' motivation, active participation, and autonomy in learning foreign languages beyond the classroom setting. The real-time interaction and feedback features offered by the application have been shown to strengthen teacher-student relationships, enrich vocabulary, and build listening skills through more structured practice (Ryannor et al., 2023; Syairofi et al., 2023). Studies conducted in various contexts, particularly in Indonesia, further affirm WhatsApp's effectiveness in supporting autonomous learning and providing learners with a more flexible and meaningful listening experience (Fauzi & Angkasawati, 2019; Syairofi et al., 2023).

However, several challenges have also been identified, such as the digital divide in internet access, users' adaptation to new technology, and the need for innovative teaching strategies to ensure WhatsApp's optimal use (Kartal, 2019; Foo Terng Hoe et al., 2021). Nevertheless, numerous reviews conclude that the benefits of WhatsApp far

A REVIEW OF THE EFFECTIVENESS OF WHATSAPP AS A LEARNING TOOL IN IMPROVING FOREIGN LANGUAGE LISTENING SKILLS IN INDONESIA

outweigh its challenges, provided its implementation is supported by appropriate instructional strategies and active engagement from both teachers and students (Behforouz & Al Ghaithi, 2024).

In this regard, this literature review aims to comprehensively examine the effectiveness of WhatsApp as a learning tool in improving foreign language listening skills in Indonesia. Through the synthesis of recent research, both national and international, this article will outline the benefits, strategies, challenges, and offer recommendations for leveraging WhatsApp as an adaptive listening learning tool in line with the demands of the digital era.

METHOD

This study employs a narrative literature review approach to conduct a comprehensive analysis of the effectiveness of WhatsApp as a learning tool in improving foreign language listening skills in Indonesia. This approach was chosen for its ability to provide thematic mapping and in-depth synthesis of published research findings. Narrative literature review, or narrative review, is a flexible and holistic method widely recognized in education and social sciences, as it allows researchers to describe, interpret, and critically assess the development of knowledge in a comprehensive manner, without being confined to rigid systematic protocols. Furthermore, this approach provides room for identifying research gaps and directions for future studies (Green et al., 2006).

As stated by Green et al. (2006), a narrative review emphasizes critical synthesis, interpretation, and the identification of patterns in key findings, theoretical trends, and methodological aspects of the chosen topic. This method also enables the author to focus the analysis on methodological elements and theoretical perspectives, allowing the findings to be used for further research development in a more reflective and argumentative manner.

The articles used in this study were collected through searches conducted across three primary databases: Scopus, GARUDA, and Google Scholar. These three databases were selected due to their broad reputation and their ability to provide fully published scientific articles available for open access. Scopus was chosen for its extensive international coverage and the high quality of its journals. GARUDA, as a national

database, provides access to relevant literature within the Indonesian context, while Google Scholar allows for easy searches across various disciplines, including research on WhatsApp in education. All selected articles are final scientific papers, fully published, and available for open access.

The literature search employed targeted keyword combinations across three databases. In Scopus, we used Boolean operators combining terms for WhatsApp, education, foreign language, and listening skills. For GARUDA and Google Scholar, we searched using simplified keyword combinations including 'WhatsApp', 'listening learning', 'foreign language', and 'Indonesia'.

Table 1. Article Screening Process

Database	Before Screening	After Screening
Google Scholar	77	2
GARUDA	24	4
Scopus	7	1
Total	108	7

Table 2. Inclusion and Exclusion Criteria

Criteria	Inclusion	Exclusion
Topic	WhatsApp as a medium for learning foreign language listening in Indonesia	Platforms other than WhatsApp or not focused on listening skills
Publication Type	Final, published, and open access scientific articles	Non-scientific articles, proceedings/abstracts without full text, closed access articles
Article Type	Empirical studies (quantitative, qualitative, or mixed-method)	Not relevant to the review focus Articles in the form of literature reviews (narrative, systematic, or critical)

A REVIEW OF THE EFFECTIVENESS OF WHATSAPP AS A LEARNING TOOL IN IMPROVING FOREIGN LANGUAGE LISTENING SKILLS IN INDONESIA

Year of Publications	2015–2025	Outside the specified year range
Language	English or Indonesian	Languages other than English or Indonesian

The article selection procedure begins with initial screening, where articles are first selected based on their titles and abstracts to ensure their initial relevance to the research topic. Relevant articles are then further examined through a full-text screening process, in which they are thoroughly evaluated based on inclusion and exclusion criteria, including the exclusion of review articles. All stages of the search and selection process are systematically documented to ensure transparency, in line with the principles of narrative literature reviews (Green et al., 2006). Once selected, the articles are analyzed using a narrative and thematic approach. The primary focus of the analysis is directed towards identifying patterns or trends in findings related to the effectiveness of WhatsApp in listening education, the learning strategies employed, the benefits, challenges, and best practices found in the studies reviewed. Additionally, a review of the methodologies and theoretical frameworks of each study is conducted to explore the potential for further research development. This approach aims to produce a synthesis that not only reflects the current empirical state but also contributes conceptually to the advancement of similar studies in the future.

FINDINGS

1. General Pattern of WhatsApp Effectiveness in Listening Learning

All studies included in this review consistently highlight WhatsApp's effectiveness in enhancing listening skills in foreign language learning across various educational levels and training contexts in Indonesia. WhatsApp is widely used to distribute audio materials (such as voice notes and audio files), assignments, and to facilitate interactive discussions, both in primary and secondary education as well as in non-formal training settings.

In the case of MTs students, WhatsApp has made the interaction between teachers and students more efficient and effective in Arabic language learning;

the voice note feature has proven to aid the development of integrated listening, speaking, reading, and writing skills (Hidayat & Asrori, 2023). A quantitative study conducted on high school students demonstrated a significant improvement in listening comprehension scores after the implementation of WhatsApp group, with a notable average increase in pre-test and post-test scores (Setyowati, 2019).

A study on restaurant waitstaff found that 80% of participants successfully used English to serve foreign guests with the support of WhatsApp groups (Tanjung & Rohayati, 2019). Similarly, in an English for Specific Purposes class, university students expressed a very positive perception of WhatsApp, acknowledging the ease of access to listening materials, enhanced discussions, motivation, and interaction as the strengths of WhatsApp in mobile-based listening education (Pratiwi & Wijayanti, 2025). Additionally, in private language course institutions, WhatsApp fosters listening learning autonomy, allowing students to practice independently, select their own topics/audio materials, engage in discussions, and request feedback outside of class hours (Setiawan & Thoyyibah, 2025).

2. Learning Strategies, Benefits, and Good Practices

All the articles reviewed highlight several WhatsApp-based learning strategies that have proven efficient in enhancing listening skills. These strategies include the use of the voice note/audio feature, where teachers routinely send audio for listening practice and vocabulary pronunciation (Anwar, Wahyuningsih, & Cahyani, 2020; Tanjung & Rohayati, 2019); regular audiovisual material delivery, where audio recordings, images, or videos are sent in a structured manner to train listening skills and enrich the learning context across various educational levels, from primary to secondary schools, as well as in language courses or training (Qoirunnisa, 2021; Hidayat & Asrori, 2023); and discussion and collaboration, where WhatsApp groups are actively used as platforms for discussion, Q&A, reflection, and providing feedback (Pratiwi & Wijayanti, 2025; Setiawan & Thoyyibah, 2025).

In addition, WhatsApp also fosters learning autonomy by allowing students the freedom to select listening materials, take notes, use dictionaries or digital tools, and discuss difficulties with teachers or peers (Setiawan &

A REVIEW OF THE EFFECTIVENESS OF WHATSAPP AS A LEARNING TOOL IN IMPROVING FOREIGN LANGUAGE LISTENING SKILLS IN INDONESIA

Thoyyibah, 2025). Collaborative learning between teachers, students, and even parents in content delivery and resolving technical issues is also noted as a prominent practice in some studies (Qoirunnisa, 2021). Key benefits of WhatsApp usage include flexible access to materials, allowing students to learn anytime and anywhere according to their needs; increased motivation and comfort due to the informal environment of WhatsApp groups, which reduces communication barriers; and facilitation of continuous practice, enabling the regular distribution of audio materials, including practice and immediate feedback.

3. Challenges and Solutions in the Field

Although WhatsApp has proven effective in enhancing listening skills, several studies also highlight the main challenges encountered during its implementation. First, technical barriers such as limitations in devices (smartphones), internet disruptions, and limited data quotas remain significant issues, particularly in schools or suburban areas (Hidayat & Asrori, 2023; Qoirunnisa, 2021). Additionally, the adaptation of teachers and students to WhatsApp is another challenge, where some teachers who are less familiar with the platform's features tend to utilize only its basic functions; the variety of strategies implemented depends heavily on the teachers' technological proficiency (Anwar et al., 2020; Hidayat & Asrori, 2023). Another issue is the lack of direct emotional interaction in online learning, which has not fully replaced face-to-face interactions, particularly in terms of motivating students emotionally. Finally, there is variation in student participation, with some students being less active due to technical barriers, lack of motivation, or limited parental support.

To address these challenges, several solution strategies have been applied, such as providing support facilities like data packages or devices from schools, and strengthening coordination between teachers, students, and parents. Innovative teaching strategies have also been implemented, including training for teachers in using WhatsApp features, recruiting more creative discussion models, and offering rewards for active participation. Additionally, alternative modes of learning have been applied, combining online and offline learning to overcome access barriers and enhance the equity of learning experiences.

4. Methodology Highlights and Theoretical Framework

The most commonly used research method is the descriptive qualitative approach (Hidayat & Asrori, 2023; Qoirunnisa, 2021; Anwar et al., 2020; Tanjung & Rohayati, 2019), where the primary data collection techniques involve observation, interviews, and documentation, with triangulation validation performed through multiple data sources. The collected data is then analyzed using the Miles & Huberman analytical model, which includes stages of data reduction, data display, and conclusion drawing. In addition, a quantitative approach is applied in some studies, such as pretest-posttest designs (Setyowati, 2019), perception surveys (Pratiwi & Wijayanti, 2025), and case studies (Setiawan & Thoyyibah, 2025).

The theoretical frameworks used in these studies include mobile learning theory, social constructivism (Vygotsky), collaborative learning, and mobile-assisted language learning (MALL). Furthermore, the theory of learning autonomy (Benson) and the principles of collaboration between schools, students, and parents in technology-based education are also adopted. Identified opportunities for future research include comparative media studies, exploring the use of WhatsApp in different educational contexts and levels, and integrating WhatsApp with blended learning models or Learning Management Systems (LMS) to support more personalized and sustainable listening learning. Longitudinal evaluations could also be conducted to assess the long-term impact of WhatsApp on listening performance and to adjust teaching strategies based on student characteristics, motivation, and needs in the digital age.

DISCUSSION

1. The Effectiveness of WhatsApp in Listening Learning

The studies analyzed indicate that WhatsApp has proven to be an effective tool for enhancing foreign language listening skills. Features that are easily accessible and familiar to many, such as voice notes, audio sharing, and group discussions, strongly support the implementation of listening exercises outside the formal classroom setting. WhatsApp not only facilitates the instant distribution of materials but also encourages collaboration, interaction, and active student

A REVIEW OF THE EFFECTIVENESS OF WHATSAPP AS A LEARNING TOOL IN IMPROVING FOREIGN LANGUAGE LISTENING SKILLS IN INDONESIA

engagement in the learning process (Hidayat & Asrori, 2023; Setyowati, 2019; Tanjung & Rohayati, 2019).

The effectiveness of WhatsApp in listening education is also evident in the improvement of learning outcomes, such as the significant increase observed between pretest and posttest scores in high school students, as well as its application in non-formal learning contexts like restaurant waitstaff training and private tutoring. WhatsApp helps overcome time and space limitations, offering students or learners the flexibility to access materials and practice at their own convenience, while also encouraging them to become more independent and reflective learners (Setiawan & Thoyyibah, 2025).

2. Various Strategies, Advantages, and Challenges

The discussion of the teaching strategies found in the various studies shows that WhatsApp is not merely a passive communication platform, but can also be optimized for various educational purposes. Some of these include the routine distribution of audio/visual exercises to support listening practice and discussion, the use of voice notes for pronunciation practice and vocabulary comprehension, as well as cross-role collaboration involving teachers, students, and even parents. WhatsApp also encourages independent learning, fostering student autonomy by providing them with space to explore topics and engage in self-evaluation.

Key benefits of using WhatsApp for learning include flexible access to materials, increased motivation, and the ability to adapt to the learning needs of today's students. This platform also helps promote active involvement, particularly for students who tend to be passive in traditional classroom settings. WhatsApp even enriches the learning experience with a contextual approach, such as the use of relevant materials in work environments, like restaurant waitstaff training or the specific needs of English for Specific Purposes (ESP) in higher education. However, challenges arising from the implementation of WhatsApp also need attention, including limitations in devices and internet access, especially in suburban areas or specific groups. Other challenges include variations in student participation and the lack of parental support in online learning.

Furthermore, teachers' adaptation to technology has not always been optimal, and the potential of WhatsApp features is sometimes not creatively utilized. Lastly, the lack of direct emotional interaction, which is often crucial for motivating students in language learning, remains a challenge. Solutions proposed in various studies include providing support such as internet data packages and devices, teacher training, and strengthening collaboration between school and home.

3. Implications of Theory and Methodology

The emphasis on the theoretical frameworks in the reviewed articles highlights the significant role of mobile learning, social constructivism, mobile-assisted language learning (MALL), and the theory of learning autonomy. WhatsApp is positioned as an effective medium for lifelong, collaborative, and contextual learning, in line with the demands of 21st-century education, which prioritizes flexibility, autonomy, and the integration of technology in the learning process (Qoirunnisa, 2021; Setiawan & Thoyyibah, 2025).

In terms of methodology, the majority of studies adopt a qualitative approach, with data validation techniques using triangulation and analysis based on the Miles & Huberman model. Some studies also apply a quantitative experimental method with a pretest-posttest design to measure listening learning outcomes. The findings from these studies tend to show consistent results, particularly regarding the benefits of WhatsApp and the patterns of solutions to the challenges faced during its implementation in the field.

4. Recommendations and Development Opportunities

Based on the synthesis of findings, several practical recommendations and opportunities for further research have emerged. These include the development of a blended learning model integrating WhatsApp with the Learning Management System (LMS) used in schools or universities. Additionally, enhancing teachers' competencies through training and enriching digital strategies is also crucial. Comparative studies on the effectiveness of WhatsApp versus other mobile media or applications across various educational levels and student backgrounds are another avenue for future research. Furthermore, longitudinal studies that evaluate the sustained impact of WhatsApp on listening skills and overall language proficiency are needed. The exploration of adaptive learning

A REVIEW OF THE EFFECTIVENESS OF WHATSAPP AS A LEARNING TOOL IN IMPROVING FOREIGN LANGUAGE LISTENING SKILLS IN INDONESIA

models tailored to students' unique characteristics, along with the development of project-based listening tasks, also presents significant opportunities.

Overall, WhatsApp has proven to be relevant and effective in supporting foreign language listening education in Indonesia, both in normal conditions and during emergencies such as the pandemic. Its flexibility, ease of access, and collaborative capabilities make WhatsApp a practical solution for learning in the digital age. Therefore, researchers and educators must actively continue to develop learning strategies, innovative materials, and supporting systems to maximize WhatsApp's benefits while minimizing the existing challenges. In this way, WhatsApp holds substantial potential to continue playing a central role in enhancing listening skills in foreign language education in Indonesia.

CONCLUSION

Based on the narrative literature review of various studies discussing the effectiveness of WhatsApp as a learning tool for improving foreign language listening skills in Indonesia, several key points can be concluded. First, WhatsApp has proven to be an effective tool for listening education, both in formal settings such as schools, madrasas, and universities, as well as in non-formal sectors such as language courses and job training. Features such as voice notes, audio sharing, and group discussions strongly support listening practice and offer a flexible learning experience.

Second, the general trend in the findings shows significant improvements in listening skills, vocabulary acquisition, as well as increased motivation, confidence, and student autonomy. WhatsApp facilitates the distribution of materials, allows for independent practice, and fosters more responsive and personal teacher-student interactions.

Third, effective teaching strategies using WhatsApp include the use of voice notes/audio, scheduled and structured material delivery, collaborative discussions, and the empowerment of autonomous learning. Other good practices involve collaboration between teachers, students, and parents/guardians to support the success of the learning process.

Fourth, the main benefits of WhatsApp in listening education are its flexible access to materials, inclusive participation, and its ability to strengthen student engagement with the content and fellow learners.

Fifth, the main challenges identified include limited access to devices and the internet, teachers' insufficient adaptation to technology, variation in student participation, and limited emotional interaction. However, solutions can be implemented through support such as providing facilities, innovative teaching strategies, and teacher training.

Methodologically, the majority of studies adopt a descriptive qualitative approach, with some studies also using quantitative-experimental methods or perception surveys. The theoretical frameworks adopted include mobile learning, social constructivism, learning autonomy, and mobile-assisted language learning (MALL).

Opportunities for future research are vast, including longitudinal studies, comparative testing of theories/methods, or the integration of WhatsApp with LMS and other digital applications, as well as the evaluation of hybrid or personalized listening models.

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A REVIEW OF THE EFFECTIVENESS OF WHATSAPP AS A LEARNING TOOL IN IMPROVING FOREIGN LANGUAGE LISTENING SKILLS IN INDONESIA

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