



## Leveraging mobile-assisted language learning technology to boost english listening skills for students at SMK Walisongo Jakarta

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### Abstract

This community service program was conducted at SMK Walisongo Jakarta with the goal of improving students' English listening skills through a mobile-assisted language learning (MALL) approach. The program was designed based on a needs analysis that identified key challenges in mastering listening skills among vocational students. The initiative contributed to students' professional development by enhancing their English listening proficiency, a skill crucial for effective communication in various professional settings. Furthermore, it introduced them to mobile-assisted learning, thereby helping them develop independent study habits using accessible technology. The program's implementation included a pre-test, an introduction to the MALL concept, demonstrations of supporting applications, structured listening practice sessions, and a final post-test. The evaluation results showed a substantial improvement in students' listening abilities, with the average score rising significantly from 66.56 on the pre-test to 95.78 on the post-test. This indicates that through a structured approach and the use of accessible mobile technology, the program successfully achieved its goal of improving English listening skills and preparing students for workplace communication challenges. In conclusion, integrating MALL can be an effective method for English language learning that aligns well with the demands of the global industry.

**Keywords:** English listening skills; Mobile-assisted language learning; Vocational high school

## Pemanfaatan teknologi mobile-assisted language learning untuk meningkatkan keterampilan mendengarkan Bahasa Inggris siswa SMK Walisongo Jakarta

### Abstrak

Program pengabdian masyarakat ini dilaksanakan di SMK Walisongo Jakarta dengan tujuan meningkatkan keterampilan mendengarkan bahasa Inggris siswa melalui pendekatan mobile-assisted language learning (MALL). Program ini dirancang berdasarkan analisis kebutuhan yang mengidentifikasi tantangan utama dalam menguasai keterampilan mendengarkan. Kontribusi program ini bagi siswa vokasi adalah peningkatan kemampuan mendengarkan bahasa Inggris, yang sangat penting untuk memahami komunikasi di lingkungan profesional. Selain itu, program ini memperkenalkan mereka pada pembelajaran berbasis perangkat seluler, membantu mereka membangun kebiasaan belajar mandiri dengan menggunakan teknologi yang mudah diakses. Implementasi program mencakup pra-tes, pengenalan konsep MALL, demonstrasi aplikasi pendukung, sesi latihan mendengarkan, dan diakhiri dengan pasca-tes. Hasil evaluasi menunjukkan peningkatan signifikan dalam kemampuan mendengarkan siswa, dengan skor rata-rata pasca-tes naik dari 66,56 menjadi 95,78. Hal ini menunjukkan bahwa melalui pendekatan terstruktur dan

Contributions to  
SDGs

4

QUALITY  
EDUCATION



8

DECENT WORK AND  
ECONOMIC GROWTH



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*pemanfaatan teknologi seluler yang mudah diakses, program ini berhasil mencapai tujuannya dalam meningkatkan keterampilan mendengarkan bahasa Inggris dan mempersiapkan siswa menghadapi tantangan komunikasi di tempat kerja. Dapat disimpulkan bahwa integrasi MALL dapat menjadi metode pembelajaran bahasa Inggris yang efektif dan relevan dengan tuntutan industri global.*

**Kata Kunci:** Keterampilan mendengarkan bahasa Inggris; Mobile-assisted language learning; Sekolah menengah kejuruan

## 1. Introduction

English is a globally significant language, and in Indonesia, it is a crucial foreign language for preparing students to meet the challenges of an increasingly competitive global landscape (Nishanthi, 2018; Wijayanti & Karimah, 2023). English language proficiency is built upon four core competencies: listening, speaking, reading, and writing. Among these, listening is a foundational skill, essential for comprehension and effective communication (Gilakjani & Sabouri, 2016; Hasibuan & Prato, 2024). The development of this skill is often influenced by a learner's vocabulary, as limited vocabulary knowledge can hinder comprehension (Alzamil, 2021).

In the 21<sup>st</sup> century, the rapid advancement of technology has significantly impacted English language education (Ningrum & Arrasyid, 2021). Technology provides access to authentic listening materials and offers new avenues for practice (Ince, 2015). One such approach is Mobile-Assisted Language Learning (MALL), which leverages handheld mobile devices like smartphones and tablets (Adijaya et al., 2023). MALL is increasingly embraced by educators and has been a subject of extensive research, recognized for its flexibility, accessibility, and adaptability (Nguyen & Teng, 2022). Mobile phones, in particular, are ubiquitous among young people and hold a significant role in modern language learning (Chwo et al., 2018; Kwangsawad, 2019).

Vocational education, which aims to equip students with the practical skills needed for specific careers, faces intense competition in the globalized job market. The 2017 Vocational High School (SMK) revitalization program and the subsequent Merdeka Belajar initiative were introduced to enhance the quality of learning outcomes, aligning them with the standards of the Business and Industrial sectors (I. P. Sari et al., 2025). In vocational education, schools prepare students for the workforce by offering hands-on learning experiences, allowing them to develop specialized skills (Ghosh & Ravichandran, 2024). Within this context, English listening skills are essential for vocational students, enabling them to understand technical instructions and communicate with international clients. Mobile devices provide a personalized learning experience, allowing students to access materials anytime and anywhere, which can boost motivation and engagement (Alisoy & Sadiqzade, 2024).

Despite the increasing demand for English proficiency in the workforce, vocational students' readiness in this area still needs improvement. A specific challenge is faced by SMK Walisongo Jakarta, where the use of technology for enhancing English listening skills has not been fully optimized, despite its pervasiveness in students' lives (Ratnadewi et al., 2023). Furthermore, many students do not yet fully recognize the importance of metacognitive learning strategies for managing their independent learning with technology.

Recent research has explored the integration of MALL into English as a Foreign Language (EFL) learning (Nguyen & Teng, 2022). For example, Kim (2013) found positive effects of mobile applications on the listening skills of university students, while Azar & Nasiri (2014) highlighted the benefits of accessibility and portability. A. Sari & Octaviani (2022) also demonstrated a significant improvement in the listening skills of vocational high school students using the Duolingo application, with 90% of students expressing positive perceptions.

The current community service program builds upon this existing research by offering a novel approach to MALL implementation. Unlike previous studies that often focused on individual use of popular applications or were conducted in university settings, this program introduces a contextual and collaborative MALL framework for vocational students, aligning it with the standards of the Business and Industrial World (DUDI). The novelty also lies in the participatory approach, where students are not passive recipients but are actively engaged in discussions, hands-on practice, and reflection on listening strategies. This combination of technology, emotional engagement, and contextual learning makes the proposed solution more practical, relevant, and sustainable for strengthening students' competencies in the face of globalization. Furthermore, this community service program directly contributes to two of the United Nations Sustainable Development Goals (SDGs), such as SDG 4 (Quality Education) and SDG 8 (Decent Work and Economic Growth).

## 2. Method

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This community service activity was designed to enhance students' English listening skills through the implementation of Mobile-Assisted Language Learning (MALL) technology. The project was conceived as a strategic intervention to address the specific needs of students at SMK Walisongo Jakarta, with the ultimate goal of improving their English listening competencies to better prepare them for the demands of the global workforce.

The program was conducted in an offline setting on Wednesday, November 6, 2024, at SMK Walisongo Jakarta. A total of 80 students participated, representing the Financial Accounting (AKL) and Computer Network Engineering (TKJ) departments. The implementation followed a structured, three-phase approach to ensure effective and measurable outcomes. Firstly, a preliminary needs analysis was conducted to understand the existing conditions and specific challenges faced by students in mastering English listening skills.

Secondly, implementation. This phase began with a pre-test to assess the students' initial abilities. This was followed by a socialization session providing an overview of MALL technology and the applications available for use. Participants then engaged in a hands-on demonstration and practice session, focusing on practical English listening in various daily contexts. The session concluded with a post-test designed to measure the students' level of understanding and skill improvement. Lastly, evaluation. The final stage involved a comprehensive assessment to determine the overall success and effectiveness of the community service program.

## 3. Results and Discussion

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### 3.1. Preliminary phase

The preliminary phase of the program commenced with a comprehensive needs analysis to identify the challenges faced by students at SMK Walisongo Jakarta in mastering English listening skills. This diagnostic step was crucial for tailoring the instructional intervention, as understanding students' specific obstacles is key to developing more effective language learning outcomes through mobile applications (Arsari et al., 2023).

To gain deeper insight into these needs, the service team collaborated closely with school representatives, including the principal and the vice-principal of student affairs. Through a series of discussions, as depicted in Figure 1, the team was able to align the program with the school's objectives and ensure the intervention was contextually relevant. This collaborative approach was instrumental in developing a targeted strategy that incorporated Mobile-Assisted Language Learning (MALL) principles.

A critical component of these discussions was the assessment of the technological readiness of both students and teachers. The team evaluated students' access to mobile devices and internet connectivity, as well as their general familiarity with using technology for educational purposes. This analysis provided the foundational data necessary to customize the program and promote the effective integration of technology into the learning process. The effectiveness of this data-driven approach was later validated by the program's evaluation results, which demonstrated a marked improvement in students' listening proficiency.

### 3.2. Implementation phase

The implementation phase commenced with a pre-test designed to evaluate the students' initial English listening skills. This pre-test served as a crucial baseline for measuring progress and identifying the participants' strengths and weaknesses. The test was efficiently administered using Quick Response (QR) codes, which enabled easy distribution and access via mobile devices (Sharma, 2013). This method not only streamlined the process but also provided a hands-on experience for students, aligning with the principles of Mobile-Assisted Language Learning (MALL) and highlighting the benefits of QR codes in education (Chee & Tan, 2021).

Following the pre-test, an informative session was conducted to introduce students to various MALL technologies and their potential benefits for improving listening skills. The session emphasized how students could independently practice English listening using mobile devices and applications outside the classroom (Figure 1). The facilitator introduced a range of useful applications, such as Duolingo, English Listening and Speaking, BBC Learning English, and FluentU (Sepyanda et al., 2023). Students were also encouraged to explore customization features, allowing them to select content based on difficulty, topics of interest, and specific language needs. The session concluded with a discussion on setting personal listening goals to motivate students to integrate these digital tools into their daily routines.

Subsequently, students engaged in a series of listening exercises specifically tailored to address the areas of weakness identified in the pre-test results (Figure 2). The pre-test-post-test control group design employed in this study (Söğüt & Melekoğlu, 2025) allowed for a systematic approach. The exercises included exposure to diverse English accents, varying speeds, and a wide range of audio content, from informal conversations



to formal interviews. This comprehensive exposure was intended to expand students' comprehension skills in real-world contexts and encourage active listening, which helps in identifying key information and understanding nuances in tone and pronunciation (Izzah & Hadi, 2020).



Figure 1. MALL's socialization by the facilitator



Figure 2. Listening exercises

The session concluded with a post-test, which was used to assess the improvement in students listening skills after the learning intervention. This post-test not only served as a final measure to observe changes in students abilities but also acted as an evaluation tool, allowing the team to understand which areas had shown significant progress and which aspects still required further attention.

The post-test results provided a clear picture of the programs effectiveness in enhancing the students English listening skills. Additionally, analysis of the post-test results enabled the team to identify patterns of progress among students, both individually and in groups, allowing them to evaluate the success of the MALL method used and refine teaching strategies for similar programs in the future (Shihri et al., 2025). The students' improved confidence and accuracy observed during the post-test served as a positive

indicator that the intervention successfully prepared them to face real-world English language challenges.

### 3.3. Evaluation

The evaluation phase of the community service program revealed significant findings, supported by both qualitative observations and quantitative data, aligning with established research in the field. The program successfully fostered a high level of student engagement and enthusiasm. Students actively participated in discussions, exercises, and the use of Mobile-Assisted Language Learning (MALL) technology. Their engagement was evident as they eagerly applied new skills and strategies introduced during the sessions (Kamasak et al., 2021; Sulaiman & Boonsuk, 2025). The use of mobile devices made the training dynamic and personally engaging, which is a critical factor in language proficiency development.

The effectiveness of the MALL approach was quantitatively demonstrated by a significant improvement in students' listening skills, as reflected in the post-test results. Figure 3 illustrates this substantial gain, with the average score increasing from 66.56 in the pre-test to 95.78 in the post-test. This improvement indicates that the program successfully met its objectives of enhancing English listening abilities.

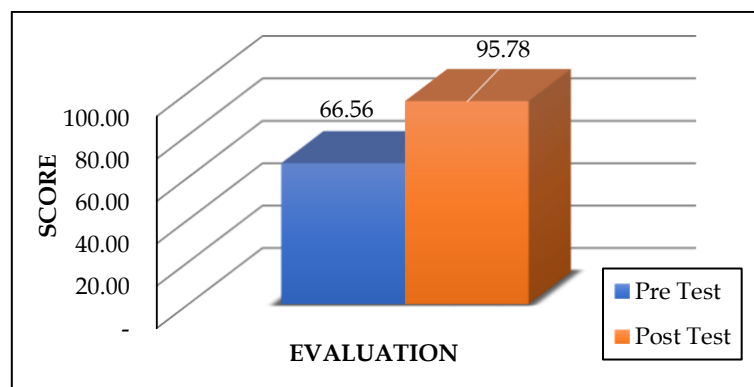


Figure 3. The comparison of pre-test and post-test score

These findings are corroborated by existing literature. A meta-analysis by Kamasak et al. (2021) concluded that mobile-assisted learning positively influences language acquisition, particularly listening skills, by facilitating self-paced learning and increasing motivation. Similarly, Alzieni (2021) found that an experimental group using MALL at Dubai Men's College showed statistically significant improvements in listening skills compared to a control group. The outcomes from the SMK Walisongo program reinforce the efficacy of MALL in improving English listening skills among vocational students, suggesting it is a scalable and contextually relevant solution for language learning.

Beyond quantitative results, the program's success was also evident in the collaborative and supportive atmosphere of the sessions. Facilitators and students actively engaged with one another, fostering a productive learning environment marked by enthusiasm and mutual respect (Karimah & Al-Nur, 2023). The continuous support provided by facilitators, combined with the students' high levels of participation, demonstrated that the integration of mobile technology in language instruction can lead to meaningful learning improvements. The alignment between the field-based implementation and global research findings highlights the potential of MALL to serve as an effective tool for preparing students for the demands of the global workforce.

## 4. Conclusion

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The community service activity at SMK Walisongo Jakarta successfully enhanced students' English listening skills by leveraging the Mobile-Assisted Language Learning (MALL) approach. The program, which began with a needs analysis and progressed through a pre-test, MALL socialization, demonstration, and practice before concluding with a post-test, demonstrated a significant improvement in the listening skills of the participants.

The effectiveness of the MALL method was evident in both the active engagement of the students throughout the training and the quantifiable improvements shown in the post-test results. This program not only improved students' ability to comprehend listening materials but also equipped them with valuable skills for independent learning, which are highly relevant for preparing them for the demands of the global workforce. By integrating technology into the learning process, the activity fostered a more autonomous and modern approach to language acquisition, aligning with the advancements in education and industry.

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## Author's Contribution

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Activity implementation: SAK, AZ, HFZ, JBM, DNM; Article preparation: SAK; Impact analysis of the community service: SAK, AZ; Presentation of community service results: SAK; Article revision: SAK.

## Conflict of Interest

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The authors declare no conflict of interest

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