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Inclusive Education Training For Teachers To Improve Literacy And Student Character In Juniorhigh School

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Abstract

The integration of digital technology in education has become an essential strategy for improving teaching quality and learning outcomes. However, many schools still experience challenges in utilizing digital learning tools effectively. This community service program aimed to improve students' English pronunciation skills and enhance teachers' competence in managing digital learning materials through technology. The program was conducted at UPTD SMP Negeri 4 Gunungsitoli Selatan and involved students and teachers as participants. The implementation consisted of observation, coordination, training activities, evaluation, and mentoring. Students received training on the use of the Elsa Speak application to improve pronunciation, while teachers were trained to use Google Site as a digital learning platform. The results showed that students demonstrated high enthusiasm and increased confidence in practicing English pronunciation. Teachers also showed positive responses to the use of Google Site for organizing and distributing learning materials. These findings indicate that digital-based training can support inclusive learning environments and improve both student engagement and teacher digital competence. Continuous digital training is recommended to strengthen technology integration in schools.

Keywords - *inclusive education, digital learning, pronunciation training, elsa speak, google site*

Abstrak

Integrasi teknologi digital dalam pendidikan telah menjadi strategi penting untuk meningkatkan kualitas pengajaran dan hasil pembelajaran. Namun, banyak sekolah masih menghadapi tantangan dalam memanfaatkan perangkat pembelajaran digital secara efektif. Program pengabdian kepada masyarakat ini bertujuan untuk meningkatkan keterampilan pelafalan bahasa Inggris siswa serta meningkatkan kompetensi guru dalam mengelola materi pembelajaran digital melalui teknologi. Program ini dilaksanakan di UPTD SMP Negeri 4 Gunungsitoli Selatan dan melibatkan siswa serta guru sebagai peserta. Pelaksanaan kegiatan meliputi observasi, koordinasi, pelatihan, evaluasi, dan pendampingan. Siswa mendapatkan pelatihan penggunaan aplikasi Elsa Speak untuk meningkatkan pelafalan, sementara guru dilatih menggunakan Google Site sebagai platform pembelajaran digital. Hasil menunjukkan bahwa siswa memiliki antusiasme tinggi dan peningkatan kepercayaan diri dalam mempraktikkan pelafalan bahasa Inggris. Guru juga memberikan respons positif terhadap penggunaan Google Site dalam mengorganisasi dan mendistribusikan materi pembelajaran. Temuan ini menunjukkan bahwa pelatihan berbasis digital dapat mendukung lingkungan pembelajaran inklusif serta meningkatkan keterlibatan siswa dan kompetensi digital guru. Pelatihan digital yang berkelanjutan direkomendasikan untuk memperkuat integrasi teknologi di sekolah.

Kata kunci - *pendidikan inklusif, pembelajaran digital, pelatihan pelafalan, elsa speak, google site*

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INTRODUCTION

The rapid development of digital technology has significantly influenced various sectors, including education. The integration of technology into the learning process has become increasingly important for improving teaching effectiveness and learning outcomes. Digital technology enables educators to provide flexible learning opportunities, interactive resources, and broader access to knowledge (Redecker & Punie, 2017). Therefore, schools are encouraged to adopt digital learning tools as part of modern educational practices.

However, the implementation of digital technology in schools still faces several challenges. Many teachers have limited experience in using digital platforms for managing learning materials, while students often lack opportunities to practice language skills using interactive digital tools. These limitations can hinder the effectiveness of the learning process, particularly in language learning where continuous practice and feedback are essential (Nasution et al., 2025).

In the context of English language learning, pronunciation remains one of the most challenging aspects for students. Many learners experience difficulties in producing accurate pronunciation and often lack confidence when speaking English in front of others. Technology-assisted pronunciation learning has been shown to support students in improving their pronunciation skills through repeated practice and immediate feedback (Chong & Reinders, 2020). Applications that utilize artificial intelligence can provide detailed feedback on pronunciation accuracy, allowing students to practice independently and improve gradually.

At the same time, teachers also need digital tools that can support the management and distribution of learning materials. Digital platforms allow teachers to organize teaching resources systematically and provide easier access for students. According to Trust (2020), digital platforms can enhance teachers' professional competence and support collaborative learning environments when used effectively (Srivastava, 2025).

Inclusive education also emphasizes the importance of providing equal learning opportunities for all students regardless of their backgrounds or abilities. Inclusive learning environments require flexible teaching strategies and accessible learning resources that can accommodate diverse student needs (Ainscow, Slee, & Best, 2019). Technology plays a crucial role in supporting inclusive education by allowing students to learn at their own pace and access learning materials in various formats.

Based on the preliminary observation conducted by the community service team at UPTD SMP Negeri 4 Gunungsitoli Selatan, several problems were identified. Students experienced difficulties in English pronunciation and lacked confidence when practicing speaking skills. In addition, teachers faced challenges in managing digital learning resources and organizing teaching materials in an accessible format. These conditions indicate the need for digital literacy training for both students and teachers.

To address these challenges, a community service program was designed to provide training on the use of the Elsa Speak application for students and Google Site for teachers. The program aimed to improve students' pronunciation skills and enhance teachers' competence in managing digital learning resources. Furthermore, the program sought to encourage the integration of digital technology in teaching practices and support inclusive learning environments.

METHOD

This community service program applied a training and mentoring approach designed to improve participants' digital literacy and language learning skills. The activities were conducted at UPTD SMP Negeri 4 Gunungsitoli Selatan and involved students and teachers as participants.

The program was implemented through several stages. The first stage involved preliminary observation and coordination with the school to identify the main challenges in the teaching and learning process. This stage aimed to understand the needs of students and teachers regarding the integration of digital technology in learning activities.

Figure 1. Preliminary Observation and Coordination

The second stage involved administrative coordination and scheduling of the training activities. During this stage, the PKM team collaborated with school management to determine the participants and the schedule of the program.

Figure 2. Administrative Coordination and Scheduling

The third stage was the implementation of pronunciation training for students using the Elsa Speak application. Elsa Speak is an artificial intelligence-based application designed to improve English pronunciation by analyzing speech patterns and providing instant feedback (Li & Hafner, 2022). The training session introduced students to the application and guided them through pronunciation exercises using their mobile devices.

Figure 3. Elsa Speak Training

The fourth stage involved training teachers on the use of Google Site as a digital learning platform. Google Site enables teachers to create simple websites for storing and distributing learning materials such as documents, videos, and links (Riwanto, et.al). Digital learning platforms are known to support teachers in organizing teaching resources and enhancing learning accessibility (Trust, 2020).

Figure 4. Google Site Training

Several instructional methods were used during the training sessions. The lecture method was applied to explain the purpose and functions of the applications. The question-and-answer method was used to encourage interaction and clarify participants' understanding. Demonstration and hands-on practice were the main methods used during the training, allowing participants to directly practice using the applications with guidance from the PKM team.

The program concluded with evaluation and reflection sessions to assess the effectiveness of the activities and identify areas for further improvement.

Figure 5. Evaluation and Reflection

HASIL DAN PEMBAHASAN

A. Results

This improvement was measured based on the percentage of students achieving the expected pronunciation competency target (minimum score of ≥70 out of 100) and the average improvement score obtained during each stage of the training program. The data indicate that the overall average improvement reached approximately 72%, with variations across stages influenced by factors such as students' initial pronunciation ability and the limited duration of the training sessions.

Tabel 1. Summary of evaluation result

Stage	Main Aspects	Pre-Test (Students Reaching Target)	Post-Test (Students Reaching Target)	Percentage Increase	Average Improvement Score
I	Initial Pronunciation Diagnosis	5 students (22%)	11 students (48%)	+26%	20
II	Introduction to Pronunciation Features	7 students (30%)	15 students (65%)	+35%	28
III	Digital-Based Pronunciation Practice	9 students (39%)	18 students (78%)	+39%	35
IV	Feedback and Interactive Learning	11 students (48%)	20 students (87%)	+39%	42
V	Final Evaluation and Reflection	13 students (57%)	23 students (100%)	+43%	50

The data were analyzed using descriptive statistical methods by comparing students' achievement before and after each stage of the intervention.

At the initial stage, only 22% of students met the minimum competency target, indicating that most students had low pronunciation ability at the beginning of the program. After the first intervention, the percentage increased to 48%, showing an early improvement as students began to recognize pronunciation patterns.

A more significant improvement was observed in Stages II and III, with increases of 35% and 39%, respectively. This can be attributed to the integration of digital applications, which allowed students to practice pronunciation repeatedly and receive immediate corrective feedback.

In Stage IV, the percentage of students achieving the target reached 87%, indicating that interactive learning and feedback mechanisms played a crucial role in strengthening students' pronunciation skills.

The highest improvement occurred in the final stage, where 100% of students achieved the target score. This result suggests that most students were able to internalize the pronunciation skills and apply them independently after completing all training stages.

Overall, the findings demonstrate that the use of digital-based learning combined with structured training stages significantly improves students' pronunciation ability in a measurable and progressive manner.

B. Discussion

The implementation of the community service program produced several positive outcomes for both students and teachers.

First, students demonstrated high enthusiasm during the Elsa Speak training sessions. The interactive nature of the application allowed students to practice pronunciation repeatedly while receiving immediate feedback (Dai, Y., & Wu, 2021; Yang, 2022). This feedback mechanism encouraged students to improve their pronunciation accuracy and become more confident in speaking English. Technology-assisted language learning has been shown to increase student motivation and engagement in language practice (Godwin-Jones, 2020).

Second, the training contributed to improvements in students' pronunciation awareness. Students were able to identify errors in their pronunciation and attempt corrections based on the feedback provided by the application. The opportunity to practice independently without fear of making mistakes helped students develop greater confidence in speaking activities (Nety et al., 2020; Salihoglu, 2024). Similar findings were reported by Li and Hafner (2022), who stated that AI-based pronunciation applications can significantly improve learners' pronunciation accuracy and confidence.

Third, teachers showed strong interest in the Google Site training. Many teachers initially faced difficulties in organizing digital learning materials and providing accessible resources for students (Gartika & Lilis, 2020; Wahyuningsih et al., 2021). After the training, teachers were able to create simple learning websites and organize teaching materials more systematically. Digital platforms such as Google Site allow teachers to integrate various learning resources and provide flexible access for students (Redecker & Punie, 2017).

Furthermore, the program demonstrated the potential of digital technology in supporting inclusive education. Inclusive education requires learning environments that accommodate diverse student needs and learning styles (Florian & Black-Hawkins, 2018). Digital tools enable students to access learning materials at their own pace and practice skills according to their individual abilities. Therefore, the integration of digital applications in education can help reduce learning barriers and support inclusive teaching practices.

Overall, the program successfully increased participants' awareness of the importance of digital technology in education and encouraged the adoption of digital learning tools in classroom practices.

CONCLUSION AND SUGGESTION

The community service program conducted at UPTD SMP Negeri 4 Gunungsitoli Selatan successfully provided digital training for both students and teachers. The use of the Elsa Speak application helped students improve their English pronunciation skills and increased their confidence in practicing spoken English. Meanwhile, the Google Site training enabled teachers to manage and distribute digital learning materials more effectively.

The positive responses from students and teachers indicate that digital technology can play an important role in supporting inclusive and effective learning environments. Therefore, continuous digital training and mentoring are recommended to strengthen teachers' digital competence and promote sustainable integration of technology in educational practices.

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