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TEACHING STRATEGIES FOR EFL INCLUSIVE EDUCATION: A STUDY OF HEARING-IMPAIRED STUDENTS

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ABSTRACT

Teaching English as a Foreign Language Learning (EFL) to hearing-impaired students encountered several challenges due to teachers' lack of readiness. Previous studies reported that it was caused by insufficient training, leading to inadequate knowledge and skills. Therefore, this study aims to explore challenges encountered by teachers in EFL in an inclusive education setting, the strategies they used to address these challenges, and students' responses to the strategies implemented. This study employed a qualitative design involving two participants from two different private secondary schools. Data were collected through semi-structured interviews and were analyzed using verbatim transcripts and repeated reading to achieve familiarity. The researcher then selected and marked relevant data and manually coded them into the main themes. The result shows that teachers encountered challenges related to communication barriers, students' struggles with understanding new vocabulary, parental support, teacher training, and the use of hearing aids. To overcome these challenges, teachers implemented several strategies, such as participating in training, Universal Design for Learning (UDL), Differentiated Instruction, *Program Pembelajaran Individu* (PPI), multimodal learning, and duality. In addition, students responded the strategies positively, as they increase in learning engagement, classroom participation, and learning outcomes. A key finding of this study is that dual-language practices or bilingualism functions not only as communication medium but also as a pedagogical approach that enhance students cognitive abilities. Through this study, teachers can adapt strategies to address various challenges in EFL learning with hearing-impaired students and school administrators can implement policies, such as supporting teachers with training in implementing inclusive education.

Keywords: Teaching English as Foreign Language, Inclusive Education, Teaching Strategies, Hearing Impairment Students

Introduction

Education in Indonesia is currently experiencing a significant transformation, evolving to support both regular formal education and inclusive education. As stated in Indonesian Law No. 8 of 2016, each individual with disabilities has the right to access quality education at all levels, pathways, and types, whether inclusive or special (Kemendikdasmen, 2021). Furthermore, Government Regulation No. 13 of 2020 strengthens this requiring that educational services and facilities must uphold quality standards and ensure equality for students with special needs. These policies demonstrate a shift toward a system that is no longer restrictive, but rather open and responsive to students' diversity. In alignment with these policies, Indonesia now has 40,164 formal education units at elementary, junior, and senior high schools that serve students with special needs (Nurhidayat, 2024). As more formal education units become more accessible to students with disabilities, there is an increasing need for these institutions to facilitate high-quality and individualized instruction. This need is specifically evident among students with hearing impairments. Indonesian health survey reported that the prevalence of disability due to hearing impairment was 0.4%, and the proportion of hearing aid users was 4.1% (Aji Muhawarman, 2025). These data show that the number of students with hearing impairment in Indonesia is relatively high. Despite the significant number of students with hearing impairments, the number of Special Needs

Assistants (SNAs), especially in English Language Learning (EFL), is still low. In Indonesia, only 5.956 units, or 14,83%, have SNA to teach children with special needs, and only 4.492 of the 17.000 teachers needed are professionally qualified after training (Nurhidayat, 2024). As a result, many teachers complain, doubt their abilities, unprepared, and reluctant due to a lack of training, knowledge, skills, and appropriate strategies for dealing with students with hearing impairments (Keerthan K et al., 2025; Pérez-Jorge et al., 2021).

Recognizing the seriousness of the issues, teacher training support is necessary for preparing teachers to facilitate effective learning. According to Polvanov (2023), teachers take responsibility not only for delivering material but also for facilitating the creation of an effective, friendly, fair, and diverse learning environment that provides space for students to ask questions, talk, experiment, and express themselves. In addition, teachers play a significant role in increasing interaction and positive responses, encouraging collaboration, and assisting with classroom management (Sharma et al., 2013). Additionally, teacher training also supports teachers in developing a deeper understanding of the principles of (Fauziyah et al., 2025) and shows their progress in developing strategies for students with special needs (Gunawan et al., 2024). Developing effective strategies helps ensure that all students participate actively (Silfia et al., 2025) and facilitates learning that is responsive to students' diversity (Mastropieri & Scruggs, 2010). In the context of EFL learning, teaching hearing-impaired students can be done by multimodal learning strategies such as flashcards, pictures, short videos, and written text. Such approaches enhanced students' vocabulary acquisition and memorization (Bansn bong et al., 2023; Mukrim & Imran, 2025). The enhancement also contributes to the improvements in writing performance (Kiliç, 2019) and oral production performance (Lin et al., 2022), as a richer vocabulary enables students to express their ideas more effectively. Hence, students who engage with and put effort into learning activities tend to show greater cognitive engagement, which is associated with higher academic achievement (Alshammari & Alrashidi, 2024; Lei et al., 2018; Zhong et al., 2025).

Recognizing the need for effective EFL strategies for students with hearing impairments, this topic has become a key focus in recent studies. However, there has been little research on teaching strategies for EFL instruction for students with hearing impairments in Indonesia. Previous research by Pérez-Jorge et al. (2021) has highlighted teachers' attitudes and perceptions towards students with hearing impairments, surveying 128 teachers in Spain and finding that 75% did not fully demonstrate a professional attitude. This study showed that many teachers were concerned that they would not be able to provide adequate and positive respons because experience limited preparedness due to insufficient knowledge and training in supporting students with hearing impairment. Other studies by Molapisi & Phasha (2024) explored teachers' views and strategies for improving academic, language, and social development, while emphasizing the need for more comprehensive investigations into teaching classroom practices, professional training, and systemic support to promote the inclusion of students with hearing impairments in a broader context. Furthermore, existing research by Suryanto et al. (2025) investigated the challenges and strategies employed in teaching students with hearing impairment, yet the reported strategies primarily focus on short-term vocabulary acquisition. Therefore, existing studies provide only a limited understanding of how EFL teachers implement adaptive instructional strategies to support students with hearing impairment in inclusive secondary schools. In particular, little is known about how these strategies are applied across different language skills in EFL classrooms. Addressing this gap may contribute to the development of more effective and inclusive teaching practices. In addition, this study contributes to the existing literature by exploring teachers' experiences with challenges and the adaptive strategies used by EFL teachers in secondary school classrooms. Unlike previous studies that mainly focused on teachers' perceptions, this study examines what challenges teachers face and how teachers adapt their teaching to meet the diverse learning needs of students in inclusive classrooms, especially for hearing-impaired students. As a result, this study aimed to explore three fundamental questions: What challenges do teachers face when teaching EFL to students with hearing impairments?, What Strategies do teachers use to address the challenges of learning for students with hearing impairments?, How do students respond to the strategies the teacher implements?, The findings are expected to have both theoretical and practical implications. From a theoretical perspective, this study contributes to a deeper understanding of

teaching strategies within inclusive classrooms with hearing-impaired students in secondary school. From a practical perspective, the findings may help EFL teachers design inclusive instructional practices that respond to students' diverse needs. In addition, the findings may also be useful as a reference for teacher education programs, curriculum development, and policymakers in strengthening the implementation of inclusive EFL learning in inclusive secondary school classrooms.

Method

This study employed a qualitative design to explore teachers challenges and strategies in EFL learning in inclusive education with hearing-impaired students. This approach is used to gather comprehensive information on teachers' experiences, challenges, and strategies (Creswell, 2013). In addition, this research design examines complex and contextual phenomena. Therefore, the use of qualitative approach is the most suitable method, which enables researchers to gain a deeper understanding of examining strategies, relationships, and challenges in implementing inclusive education in EFL learning for students with hearing impairments. Two participants were selected through purposive sampling because they met the criteria: 1) having experience in EFL teaching with hearing-impaired students; 2) teaching in an inclusive educational setting; and 3) willing to actively participate in an in-depth interview. Although this study involved only two participants, the sample size was considered appropriate because the aim was to gain in-depth understanding of the phenomenon. The participants were intentionally selected based on their relevant experience and ability to provide detailed insights into EFL learning in an inclusive educational setting with hearing-impaired students. The study participants were two English Teachers from two secondary schools in Yogyakarta. Participant A teach a private school specializing in inclusion, while participant B teach a regular private school with a policy for inclusive classrooms. Due to different backgrounds, the challenges faced and the strategies used also differ.

The differences in challenges and strategies increase transferability because the results apply not only to a specific condition but also to various contexts. Various strategies applied in different contexts of inclusive classrooms strengthened credibility, as the findings presented are contextual and relevant to the various conditions encountered (Andriyan et al., 2023). To further ensure trustworthiness, dependability, and confirmability, maintain an audit trail of coding by documenting the entire research process in detail and transparently, and taking reflective notes throughout the analysis. This study adhered to ethical principles, including obtaining voluntary participant consent and the right to withdraw from the research process at any time. The study also maintained confidentiality by using anonymous names in writing to protect participants' identities. Participants also had the right to receive a clear explanation of the research objective and how the data would be used. The ethical protocol in this study emphasizes respect, transparency, and responsibility. This study conducted a semi-structured interview as the main research instrument. The interview questions were adapted from Molapisi & Pasha (2024). The researcher adapted the instrument based on a previous study that examined students with hearing impairments. They provided 4 items of open-ended questions, and this study adapted 4 of them and added 3 additional items to gather more information. The adapted instrument discusses teachers' views, strategies, the effectiveness of those strategies, and challenges. Meanwhile, this study also requires information on students' responses to the strategy, the classroom environment, and school support. Therefore, in total, this study conducted interviews using 7 open-ended questions. The question items are described in Table 1.

Table 1. Interview Questions

No	Indicator	Question
1	Teachers' view	Please share your views about the inclusion of learners with hearing impairment.
2	Strategies used	Take me through the strategies you follow to include learners with hearing impairments in the curriculum.
3	Students respond	How do learners respond to the strategy (their participation and understanding) that is implemented in the class?
4	The effectiveness of the strategies	How those strategies enhance the language, social, and academic development of learners with hearing impairments.
5	Challenges	Feel free to share any challenges or positives related to the inclusion of learners with hearing impairments. How to solve challenges?
6	Classroom environment	How does the classroom environment support the implementation of inclusive classrooms?
7	School policy	Please share how school policy and facilities support the implementation of inclusive education in the classroom.

The adaptation process also involved adjusting the language to suit participants' preferences. To ensure the suitability of the content and the clarity of the instrument items, the validation process was conducted through expert judgement to assess its relevant and clarity. The expert who was not involved in the study provided feedback regarding the wording and relevance of the research contract indicators. Finally, the instrument was declared suitable for use after revisions were made in accordance with expert suggestions. After the instrument was designed, participants were informed about the study's objective and provided informed consent. Following consent, data were collected through semi-structured interview, which allowed researchers to provide guiding questions while maintaining flexibility to ask additional questions to explore participants' experiences and perceptions in depth (Creswell & Poth, 2018; Brinkmann & Kvale, 2015). Each interview lasted 45 - 60 minutes in Indonesian and was conducted individually in the participants' school's office to ensure a comfortable and uninterrupted environment. With participant consent, all interviews were audio-recorded and transcribed verbatim to ensure data accuracy. Field notes were also taken during the interview process to capture gestures or nonverbal cues.

The data analysis process was conducted using the model developed by Miles et al. (2018), including data reduction, data display, and conclusion drawing. In the data reduction stage, all interview recordings were transcribed verbatim and involved repeated readings to understand the data's context and to achieve familiarity with the data. The researcher then selected and inductively marked important parts or relevant data by identifying meaningful context relevant to the research objective and manually coding them to identify the main themes. The coding results were presented in a matrix to facilitate the identification of patterns and relationships between categories. For the display stage, the researcher compiled findings in tables and thematic narratives. Finally, in drawing conclusions, the researcher interpreted the findings to gain a deeper understanding of the teachers' challenges and strategies in supporting the EFL learning of students with hearing impairments, and how students respond to the strategies implemented.

Table 2. Method Procedures

Stage 1	Stage 2	Stage 3
Instrument Preparation	Data Collection	Data Analysis
↓	↓	↓
Interview Question Expert Judgement Informed Consent	Interview Transcript	Analysis Interpretation

Findings and Discussion

This study aims to explore EFL teachers' challenges and strategies in inclusive education for students with hearing impairments. Therefore, this section will discuss the results of the challenges, the strategies applied, and the effectiveness of those strategies in improving EFL learning for students with hearing impairments. Challenges in EFL Learning with Hearing Impaired Students, One of the biggest and most frequently mentioned problems by participants is communication. Participant A reported that students with hearing impairments often lack a strong foundation in their first language, which can lead to ambiguity or misunderstanding in communication, *"The biggest challenge is actually communication. Sometimes communication is not connected. I speak slowly and clearly, but the student still does not understand. (P.A)"* Participant B explained that the barriers to communication that teachers experience stem from students' lack of understanding of how to structure first-language (L1) sentences appropriately, *"There was one student who had difficulty in learning because even in Indonesian, she would often reverse words. For example, the sentence 'Saya tidak makan' was pronounced by the student as 'makan saya tidak'. These often make communication difficult. (P.B)"*

Another major challenge is pronunciation. Participant A reported that teaching pronunciation becomes a huge challenge for students with hearing impairments due to the difference between the word spelling and its pronunciation, *"One of the most difficult aspects of teaching them is pronunciation, especially for phonetic words. For example, for the word 'table', regular students can immediately pronounce it clearly. But students with hearing impairments, instead of pronouncing*

"/ˈteɪ.bəl/", pronounce the word as /tabəl/. (P.A)" Schools have made many efforts to support the learning success of students with hearing impairments, one of the most significant being collaboration and coordination with parents. Unfortunately, participants reported that some parents remain unsupportive, either in coordination or in continuing to learn at home. Participant B remarked, *"Communication with parents is the most important thing, but some parents still hide the actual situation students face, which makes it difficult for us to support students as effectively as possible. (P.B)"*. Participant A explained the situation when updating parents on student progress, *"We regularly update parents on their children's progress. However, every parent is different; some are active and willing to cooperate, but others are indifferent. (P.A)"*

In addition, unequal training is another challenge faced by teachers in inclusive education settings. Participant B reflected that she felt the biggest challenge in teaching was her own ability due to her lack of knowledge about inclusive education: *"I have never received training, so I have to figure out the appropriate learning strategies myself. (P.B)"* Participants reported that hearing aid errors is another problem encountered by teachers in EFL learning. Students cannot focus on only one sound, so it is noisy for them. Participant A explained, *"Some children say that the devices hurt when worn for long periods of time. In junior high school, all the children are very active, so the classroom atmosphere is lively and noisy. For children who wear hearing aids, all sounds come in, so they need time to filter the sounds. This makes them dizzy, easily tired, and difficult to focus. (P.A)"*. Participant B described the same condition that hearing aids effect students cognitive in learning, *"All sounds come in, so it's hard for them to understand. (P.B)"*. This condition indicates that the use of hearing aids often makes it difficult for students to focus on a single sound, thereby affecting EFL learning in the classroom.

Communication Strategies with Hearing Impaired Students To reduce communication barriers, participant A constantly seeks the most suitable communication strategies and patterns. In social interactions, students with hearing impairments use sign language with peers who also have hearing impairments. However, English teachers who cannot use sign language, rely to other communication patterns such as lip reading, *"I cannot use sign language, so I automatically use lip reading. So, I speak more clearly, slowly, and with gestures (P.A)"* She also demonstrated the use of gestures when speaking. For example, when asking, *"Kamu lagi apa? Sudah makan?"* The teacher can say, *"ka-mu la-gi a- pa? Su-dah ma-kan?"* This sentence is spoken slowly and clearly, with lip-reading, and accompanied by hand gestures that demonstrate eating. On the other hand, participant B explained that communication with students with hearing impairments can also be facilitated through writing and the use of AI, *"I also use writing if they don't understand. I write on the board or in my notes. Now there is also technology that translates speech into writing. (P.B)"*

Both participants reported that teachers grouped hearing-impaired students and regular students to enhance communication and social interaction; they reported, "*...they interact not only with deaf friends, but also with regular friends, so they have no choice but to speak and practice. (P.A)"*, *"...some of their friends even learned sign language from them, (P.B)"*. Participant A added that interaction had not only happened beyond hearing-impaired students. Instead, regular students were also curious and learn sign language to interact and communicate with their hearing-impaired peers, *"Some children became curious and wanted to learn simple sign language. So, when they talk, they like to use hand gestures that they made up themselves. (P.A)"*. This shows that empathy and support grew among them. Strategies in Teaching EFL for Hearing Impaired Students, Participating in training became one strategy in EFL teaching for hearing-impaired students; Participant A explained that training is conducted at the start of each new semester, so there is a total of two training sessions per year, *"Before the start of each new semester, the school always holds a 'teacher at work' session in collaboration with an expert training institution. There, we receive training on anything related to learning. (P.A)"* In implementing the inclusion system in the classroom, schools have different policies, so participants also use different strategies and approaches to teaching English. Participant A explained that she implemented three main strategies that were school policies, "*... so, at school, we implement three strategies: Universal Design for Learning (UDL), Differentiated Instruction, and the Individual Learning Program (Program Pembelajaran Individu, or PPI). (P.A)"*

With the UDL strategy, participant A explained that all students receive the same

activities, but the level is lowered to accommodate students with hearing impairments. Next, Differentiated Instruction facilitates students according to their individual needs. Participant A explained this point, *"For example, in a class of 11 children, there could be three learning models and three types of worksheets. (P.A)"* Lastly, the PPI strategy is designed specifically for students who need special guidance. On the other hand, participant B described that the school does not implement a special policy for inclusive students, *"In terms of the curriculum, they study the same as other children... (P.B)"* However, participant B tries to facilitate students according to their needs, *"The task is the same, but the approach is different. So, when I finished explaining to the class, I approached them, explained slowly, and gave easy examples. (P.B)"*. These show that participant B used a direct approach and provided examples to facilitate activities for students with hearing impairments in EFL learning.

During the EFL learning process, teachers modify learning materials to make them appropriate for students' needs, focusing on vocabulary and sentences that can be used in everyday communication, "*...for me, vocabulary is the most important thing... (P.B)"*. Participant A added*, "I usually teach them in seventh and eighth grade, so it's really super basic. Still at the vocabulary and daily conversation level. (P.A)"*. Participant A shared her experience, *"For example, I point to a table and say, "This is called meja in Indonesian, and table in English (P.A)"*. Here, the teacher shows that vocabulary acquisition cannot be achieved directly through English instruction but requires a dual approach: first teaching vocabulary in Indonesian, then introducing English vocabulary. She added another strategy used, *"I also use body language and facial expressions to help them understand the context. If it's 'happy,' I smile; if it's 'sad,' I make a sad face. (P.A)"*. While Participant A gave direct examples, Participant B used written media to introduce vocabulary. "...*Sometimes I repeat the vocabulary many times so that they really understand what is meant. I also often write important words on the board, so it's not just talking. (P.B)"* To support vocabulary acquisition and EFL learning in the classroom, participant A explained that teachers need the suitable approach, such as using examples and showing real objects, *"When teaching about animals, I show pictures of animals while writing on the board. That way, students can see the words and the picture at the same time. For example, if I want to explain cookies, I give them biscuits as an example. (P.A)"*

Meanwhile, participant B takes a personal approach to students, *"Sometimes I write down the material, take a photo, and send it to the parents' WhatsApp so they can review it again. (P.B)"*. Both participants also provide additional sessions for students with hearing impairments to discuss their learning experiences in class or ask questions about materials which they do not understand. Increasing students' enthusiasm for learning became one important strategy reported by both participants. For instance, teachers grouped them with other regular friends. Participant B shows this condition greatly helped students with hearing impairments to feel a supportive learning environment, "*...the discussions brought together students with hearing impairments and regular students. I once asked students to make an advertising video assignment, and without dividing the groups, other students invited their hearing-impaired friends to join. Even though she could not yet play a role in the oral presentation. (P.B)"*. Participant A also highlighted the support provided by peers to students with hearing impairments, *"We often pair special needs students with regular students on a single project, such as group work. It's like peer tutoring; they teach each other. (P.A)"*

Students Responses to the Strategies, Schools and teachers have implemented several strategies to improve hearing impaired students' communication and learning engagement in EFL learning. First, in terms of communication, participant A used various communication patterns, such as adjusting intonation, using gestures, and taking a personal approach. This strategy elicited positive responses from the students, *"We try our best to find a communication style that suits them... they become active because they feel constantly involved. The children become more confident and participatory, and the classroom atmosphere becomes positive. My relationship with them has also become closer. They feel comfortable socializing and expressing their opinions. (P.A)"* In addition, participant B used lip reading and writing strategies to communicate with students. Although difficult, participant B reported that the method was considered to facilitate communication with students, *"They read lip movements, but often still cannot speak directly. However, they are using technology that records the audio and then*

generates text. So, when the teacher explains something, they record it, and the app provides a transcript, it helps them understand the context. (P.B)" Second, to improve communication and social interaction skills, both participants implemented a strategy of pairing regular and hearing-impaired students during discussion activities. As a result, students showed their enthusiasm in learning, *"We often combine regular and special students on a project. As interactions with peers develop, and because they are with both deaf and regular friends, they have no choice but to talk, practice, and even give presentations. Even when they give presentations, they want to come forward and speak; they make a sound. (P.A)"*

In addition, participant B showed the students' response to this strategy, *"They enjoy learning because they have a supportive environment. The children are also active in group discussions, even though they are not yet able to give oral presentations. (P.B)"* Third, this study found that UDL, Differentiated Instruction, and PPI increased students' participation and enthusiasm, *"They were active because we invited them to participate, not isolated them. In UDL, all students were treated equally in activities, with oral communication still used. They nodded or reacted—either a little confused or understanding—but from the look in their eyes, they were trying to grasp what we were saying. In academic achievement, they may not be as good as regular students, but in terms of attitude and enthusiasm for learning, they are extraordinary. They remain focused, try to listen first, look first, and try to understand. (P.A)"* Fourth, whenever students receive positive feedback, it motivates them to pronounce word, *"For example, if they mispronounce a word, I don't immediately blame them, but I repeat the pronunciation slowly while they imitate me. Sometimes it's funny because they smile when they finally get it right. I always tell them, 'The important thing is that you try, it's okay if you're not perfect yet.' And it turns out the results are good too—they can graduate and continue on to high school. That's amazing to me. (P.A)"*

As the final outcome of strategies implemented in EFL learning in secondary schools, students show the courage and confidence to give oral presentations, *"At our school, we have student-led conferences, where children present their learning process and share their stories with their parents, homeroom teachers, and support teachers. Although their voices aren't always clear—especially for children who are new to hearing aids—they dare to try. That's an achievement, too. We are very proud of their courage to speak in public. Additionally, the most rewarding part is when they finally succeed, even in reading short English texts. (P.A)"* On the other hand, despite using limited strategy, participant B reported students show enthusiasm in learning, although their scores are not satisfactory, *"The progress is not significant, and the scores are not high yet; the important thing is that they are willing to learn and submit their assignments. They are also not yet able to give presentations or speak. (P.B)"* Finally, participants explain that support from parents are very important for better learning outcomes of the students, *"If the child is often engaged in conversation and trained to speak at home, the results are good. But if they are not spoken to or trained at home, the results at school are also poor. (P.A)"*. Participants B remarked, *"...if parents support their children by learning at home, their development is better. So, family support is influential. (P.B)"*

Discussion, Challenges with Teaching Hearing-Impaired Students in EFL Learning, The findings revealed several challenges in EFL learning for hearing-impaired students, including communication, vocabulary acquisition, parental participation, training, and the use of hearing aids. This study found that the biggest challenge in EFL learning is communication between teachers and students, which is hindered by a lack of an L1 foundation, leading to an inability to use appropriate sentence structure. This finding is consistent with previous research by Andreou & Segklia (2019), which reported that learners experience communication barriers due to a lack of linguistic transfer between first and foreign language. Moreover, students will also face weak metalinguistic skills such as phonological awareness, spelling knowledge, and syntactic awareness. Weak metalinguistic skills lead to an inability to reflect on sentence structure, resulting in ambiguous communication (Artieda, 2017). In addition, when communication involves errors in sentence delivery, such as ungrammatical or inaccurate constructions, both students and teachers cannot understand the meaning, so the results of the communication do not appear in the mutual response. In other words, the sentences delivered do not elicit understanding from the interlocutor (Ghufron, 2022). This condition leads to students' unwillingness to speak, reducing verbal output and hindering overall speaking performance (Cahya & Kurnia, 2026). Therefore, it needs to be addressed because communication

challenges hinder hearing-impaired students' speaking skill and it is also important because effective communication is a crucial part to support learning effectiveness, which can lead to better learning achievement. Han et al (2024) stated that communication in EFL learning is an important factor that influences learner proficiency and engagement. Students who communicate more effectively with teachers have been shown to improve their self-efficacy and academic achievement (Cong & Li, 2022). For students who lack the willingness to speak, this results in reduced verbal output and hinders overall speaking performance (Cahya & Kurnia, 2026).

Another key finding from this study was that students with hearing impairments experience difficulties with vocabulary acquisition due to differences in spelling and pronunciation; for example, the word "table" should be pronounced "/ˈteɪ.bəl/", but hearing-impaired students often pronounce it "/tabəl/". It is influenced by a few exposures to phonetic instruction for hearing-impaired students. This situation was explained in a previous study by Andreou and Segklia (2019), showing that English falls into the category of deep orthography, in which there is less direct correspondence between letters and sounds. This is reinforced by the explanation that irregular orthography complicates decoding and retention, making it difficult for students with hearing impairments to understand and distinguish phonemes (Almusawi, 2019). The condition of less correspondence between letters and sounds due to the deep orthography makes it difficult for students to learn new vocabulary and to pronounce the word correctly. Due to these difficulties, students rely on visual aspects to learn vocabulary because of the lack of exposure to hearing certain sounds. The findings in this study also indicated that teachers face challenges due to passive parental involvement. Several previous studies explained that this condition can result from factors such as a lack of parental knowledge, time, support, awareness, and interest (Kurniati et al., 2025; Susanti et al., 2024; Yunita & Subagya, 2025). As a result, misinformation often arises regarding students' conditions and development, which then causes teachers to have difficulty determining the most suitable learning strategies, so that students cannot be facilitated to the maximum extent (Anastasya, 2025). In other words, teachers cannot prepare the most suitable strategy based on students' needs because of less parental involvement. If parents can maximize their role to be involved in hearing-impaired students' learning by communicating students' condition, teachers can prepare the material, activity, and strategy based on their needs.

This study finds that inclusive education teachers receive unequal training, leaving them feeling unprepared due to a lack of knowledge in inclusive education. A previous study by Nabila et al. (2025) reported that teachers urgently need specialized training to strengthen their ability to interact with hearing-impaired students. In addition, it also improves teachers' readiness and proficiency, which can help teachers facilitate students' effective communication and learning (Holcomb et al., 2025). Teachers who do not participate in training tend to feel unconfident in supporting hearing-impaired students' EFL learning, because teachers feel unready to prepare the learning instruction and suitable strategies that cover students' need. Another challenge in EFL learning was that students tended to be unfocused because they could not concentrate on a single sound. This study highlights that hearing aids enable students with hearing impairments to hear all sounds around them, making it difficult to filter out unwanted sounds. Previous research by Kanwal (2022), reported that hearing aids produce annoying sounds, but teachers do not address this problem; instead, they simply ask students to remove their hearing aids. Furthermore, no other discussions were found regarding the use of hearing aids that may disrupt students' focus on learning. Instead, previous studies have discussed the benefits of using hearing aids. Therefore, future research is needed on the obstacles to hearing aid use and the appropriate steps to address them.

Communication Strategies with Hearing Impaired Students, To address communication barriers, this study found that teachers used several strategies, such as adjusting their tone of voice, using gestures, writing, and utilizing technology, including text-to-speech. These findings are in line with Mehrabian (1972) as cited in Nabila et al. (2025), intonation contributes 38%, and visual cues such as body language and facial expressions contribute 55% to the conveyance of emotions, concern, empathy, and attention, which can help improve understanding, engagement, motivation, and a responsive learning atmosphere for students. When student understanding is not achieved through oral communication, teachers use visual scaffoldings such as writing words and concepts, drawing, and underlining on the board (Iturriaga, 2025), or utilizing assistive technologies to

support student learning success (Antia et al., 2009). Birinci & Sariçoban (2021) found that visual scaffolding is more effective for long-term retention, as it helps hearing-impaired students learn and remember new vocabulary better. In addition, assistive technology provides a more interactive and comprehensible learning experience (Fitria, 2025), also allowing students to access information (Rashid et al., 2024). As a result, hearing-impaired students can participate in social life (Alit et al., 2025), be independent in performing tasks (Rashid et al., 2024), and connect with other students, which helps them remain calm, happy, and motivated to do more work (Alzahrani, 2022). Therefore, if students' understanding cannot be achieved through oral communication; intonation and body gestures, teachers use visual scaffoldings and assistive technology to support hearing-impaired students in communication.

This study found that in inclusive classrooms, students with hearing impairment were given opportunities to interact with peers. This was also discussed in previous findings, which showed that such interactions can improve their social skills through nonverbal communication practices (Nurita et al., 2025). Furthermore, the development of social interaction also supports the creation of a positive learning environment. Thus, students can experience an atmosphere that supports and values diversity (Nurita et al., 2025), provides space to express themselves, fosters students' confidence and enthusiasm for learning (Hutasohit et al., 2025). By interacting with peers, students with hearing-impairment experience a supportive learning and it fosters their participation in class. Strategies in Teaching EFL for Hearing Impaired Students, To facilitate hearing-impaired students in EFL learning, teachers use several strategies, including taking part in training, Universal Design Learning (UDL) method, Differentiate Instruction*, Program Pembelajaran Individu (PPI)*, multimodal learning, dual language, and group discussion.

This study found that teachers who participated in the training were better prepared in terms of teaching strategies for EFL classrooms. The training was shown to have a significant impact on teachers' attitudes (Berliana & Nugraha, 2024; Tristani & Bassett-Gunter, 2020), enriching their knowledge regarding inclusive education (Berliana & Nugraha, 2024; Tristani & Bassett-Gunter, 2020), including providing insights into adapting teaching methodologies and strategies (Crispel & Kasperski, 2019), such as individualizing instruction (Zagona et al., 2017), as well as an understanding of the cognitive development of students with disabilities (Triviño-Amigo et al., 2022). Another impact on teachers is evident in improved teacher well-being, particularly in mental health and stress management, as the training provided a space for teachers to share experiences, ideas, and challenges with peers, thereby fostering a sense of emotional and professional support (Berliana & Nugraha, 2024). Through the acquisition of this knowledge and these skills, teachers' perceptions of inclusive education have shifted (Berliana & Nugraha, 2024), and their self-efficacy has also increased (Triviño-Amigo et al., 2022), supported by care, understanding, and sensitivity toward students' needs (Crispel & Kasperski, 2019). This situation fosters the development of more positive teacher-student relationships because teachers can allocate appropriate time and attention and adapt teaching methods to meet students' needs (Crispel & Kasperski, 2019; Triviño-Amigo et al., 2022). With more adequate skills and knowledge, teachers can create a comfortable and inclusive learning environment (Ayomsari & Azizah, 2024; Berliana & Nugraha, 2024). Furthermore, participating in training can enhance teachers' knowledge on methodologies and strategies in teaching inclusive classrooms, make teachers feel supported, and develop teacher-student relationships.

In addition, this study indicates that teachers use three primary long-term learning strategies: Universal Design for Learning (UDL), Differentiated Instruction, and *Program Pembelajaran Individu* (PPI). UDL is used to facilitate the diverse needs of learners through flexible content representation, active student engagement, and student expression to provide students with meaningful learning opportunities (Zakariyah et al., 2024; Hartmann, 2015; Katz & Sokal, 2016). Next, according to rabaika & Noviyanti (2025), the Differentiated Instruction strategy helps teachers deliver content through various modalities to accommodate differences in students' levels and learning needs. Finally, PPI is designed based on the results of psychological assessments and observations of students' learning needs, so that PPI may differ from one student to another (Rabaika et al., 2025). According to Mardiana et al. (2020), PPI emphasizes providing guidance and assistance to students with disabilities to help them catch up and optimize their abilities through three stages: planning, implementation, and

evaluation. These three strategies mainly aim to facilitate the diverse need of students in inclusive educational setting.

Furthermore, this study found that teachers utilized multimodal strategies in teaching, such as real objects, pictures, flashcards, and other visual aids. This finding is consistent with previous studies that found that the use of visual aids, realia, and flashcards can enhance students' understanding (Charles & Sungwa, 2024; Marschark et al., 2015; Suryanto et al., 2025; Wainscott & Spurgin, 2024). The use of visual media is also closely related to multimodal digital tools that can create interactive presentations and reinforce information in various interesting formats (Algrni, 2020), resulting students to more active in discussing and asking questions (Kirani & Nuroh, 2025). In a study by Prystiananta & Noviyanti (2025), many students reported that using digital multimodal tools helped them learn more vocabulary, improve pronunciation, and stay engaged in learning (Charles & Sungwa, 2024). Thus, the strategy of visual aids which implemented by teachers in EFL learning with hearing-impaired students can boost students understanding of vocabulary, also help students to engage in the learning activities. Moreover, the findings of this study indicate that teachers adopted a dual-language strategy in teaching new vocabulary by using both students' L1 and English, thereby reflecting bilingualism in EFL instruction; for example, when teachers introduce the new vocabulary "table", teachers say it in Indonesian first, "*meja*", and then introduce it in English, "table". This finding is particularly new because previous studies have focused on the use of bilingualism in EFL learning for regular students. Studies have indicated that bilingualism in EFL learning is considered effective for students with low proficiency levels because it clarifies meaning, creates a less threatening learning environment, reduces students' language anxiety, and ensures students' understanding of the material (Rukmi & Khasanah, 2020; Surayatika, 2019). Furthermore, bilingualism has been shown to enhance students' cognitive abilities (Kamila et al., 2025; Salem & Yahya, 2023) and foster critical and creative thinking skills (Kamila et al., 2025). In contrast, this study revealed bilingualism for hearing-impaired students in EFL learning. This finding is a novel because bilingualism as a pedagogical approach, especially in introducing new vocabulary, can meaningfully support students' language learning processes. This indicates that bilingualism is not only relevant to the mainstream of EFL classrooms but also can be implemented in inclusive educational settings. The final strategy teachers employed in EFL instruction is group discussion. Including students with hearing impairments in groups provides them with opportunities to improve their social and language skills (Fitria, 2025). By practicing communication with their peers, students feel supported (Nurmala et al., 2025), which in turn boosts their self-confidence (Fitria, 2025; Nurmala et al., 2025). The increase of self-confidence encourages students to actively engage in learning, ultimately improving their learning outcomes (Awaludin et al., 2024). Moreover, grouping students with regular students in classroom discussion improve their confidence to socialize and communicate. Furthermore, it helps students to improve their academic performance.

Students Responses to the Strategies, Through the communication and teaching strategies implemented, students felt they were in a supportive learning environment because they were constantly engaged by both teachers and peers in communication and learning. This finding aligns with previous research, which states that providing opportunities for hearing-impaired students to be directly involved encourages their engagement and understanding in learning (Charles & Sungwa, 2024; Levine Brown et al., 2023; Martinez et al., 2019; Yuan, 2024). Additionally, students' social interactions and self-confidence have increased because they feel comfortable socializing and expressing their opinions (Putra & Suyatno, 2021). Moreover, it encourages students to actively participate in class, thereby improving their learning outcomes (Luangrungruang & Kokaew, 2022). Implementing these strategies make students experience supportive learning environment, resulting in the improvement of students learning engagement, self-confidence and learning outcomes.

Conclusion

This study explored the challenges of teaching EFL to hearing-impaired students, strategies to address these challenges, and students' responses to the implemented strategies. The findings indicated that the challenges related to communication barriers due to students' limited knowledge of their L1, a lack of parental participation, insufficient training to strengthen teachers' skills and knowledge, and the use of hearing aids that can

disrupt students' focus during classroom instruction. To address these challenges, teachers employed various strategies. Regarding communication, teachers adjusting their tone of voice, using gestures, writing, and text-to-speech technology. Meanwhile, to enhance communication and social interaction, teachers utilize group discussion. Furthermore, teachers joined with professional development, such as teacher training and employed several specific strategies in teaching, including Universal Design for Learning (UDL), differentiated instruction, *Program Pembelajaran Individu (PPI*), and multimodal learning. Overall, students show positive response to these approaches, reporting increased engagement, participation, social interaction, and self-confidence.

A notable finding of this study is that bilingualism emerged as an effective pedagogical approach that facilitated communication and learning, and enhanced cognitive abilities. Since this study's novelty was the implementation of bilingualism in inclusive education, this study calls for further research to study bilingualism in inclusive education settings to gain deeper knowledge. In addition, the current study did not explore hearing-aid errors that affect the learning process, therefore, future research is needed to investigate the factors and strategies to reduce the give insight regarding adaptive strategies that can be implemented in Indonesian inclusive educational settings. In addition, educational institutions should strengthen professional development opportunities that focus on inclusive pedagogy to support diverse learners' needs.

References

Aji Muhawarman. (2025, March 3). *Kemenkes Ajak Masyarakat Peduli Kesehatan Pendengaran*. Kemenkes. https://kemkes.go.id/id/kemenkes-ajak-masyarakat-peduli-kesehatan-pendengaran

Algrni, N. S. (2020). The Effectiveness of Using Multisensory Approach in Enhancing Achievement and Retention of English Vocabulary Amongst Intermediate Female Students with EFL Learning Disabilities. *Journal of Education and Practice*. https://doi.org/10.7176/JEP/11-9-17

Alit, N. A., Ellias, Mohd. S., & Ahmad, A. D. (2025). TECHNOLOGY APPLICATION IN TEACHING AND LEARNING FOR HEARING IMPAIRED STUDENTS: A RECENT SYSTEMATIC REVIEW. *International Journal of Education, Psychology and Counseling*, *10*(58), 541–561. https://doi.org/10.35631/ijepc.1058036

Almusawi, H. M. (2019). Determinants of spelling proficiency in hearing and deaf graduate students: The presentation of medial glottal stop. *Ampersand*, *6*, 100050. https://doi.org/10.1016/j.amper.2019.100050

Alshammari, S. H., & Alrashidi, O. (2024). The Effect of Students' Engagement on Their Learning Achievement in EFL Online Courses: A Structural Equation Modelling Approach. *International Journal of Online Pedagogy and Course Design*, *14*(1), 1–18. https://doi.org/10.4018/IJOPCD.357875

Alzahrani, A. (2022). The Implementation of Assistive Technology with a Deaf Student with Autism. *International Journal of Learning, Teaching and Educational Research*, *21*(10), 280–295. https://doi.org/10.26803/ijlter.21.10.15

Amira Izzati. (2024). *Kemendikbudristek Sebut terdapat 40.164 Satuan Pendidikan Formal di Indonesia dengan Peserta Didik Berkebutuhan Khusus*. https://carapandang.com/news/read/kemendikbudristek-sebut-terdapat-40164-satuan-pendidikan-formal-di-indonesia-dengan-peserta-didik-berkebutuhan-khusus?page=2

Anastasya. (2025). Kolaborasi Antara Guru Dan Orang Tua dalam Mendukung Pendidikan Inklusif. *JAMP: Jurnal Administrasi dan Manajemen Pendidikan.*

Andreou, G., Segklia, M. (2019). Cross-Linguistic Skills Transfer from the Second/Foreign Language to the First among Students with Learning Disabilities after an Intervention Program in the Second Language. *Scientific Research Publishing.* https://doi.org/10.4236/ce.2019.105077

Andriyan, A., Hendriani, W., & Paramita, P. P. (2023). Pendidikan inklusi: Tantangan dan strategi implementasinya. *Jurnal Psikologi Terapan Dan Pendidikan*, *5*(2), 94. https://doi.org/10.26555/jptp.v5i2.25076

Antia, S. D., Jones, P. B., Reed, S., & Kreimeyer, K. H. (2009). Academic Status and Progress of Deaf and Hard-of-Hearing Students in General Education Classrooms. *Journal of Deaf Studies and Deaf Education*, *14*(3), 293–311. https://doi.org/10.1093/deafed/enp009

Artieda, G. (2017). The Role of L1 literacy and reading habits on the L2 achievement of adults learners of English as a foreign language. *System.* https://doi.org/10.1016/j.system.2017.03.020

Awaludin, A., Ruhiat, Y., Anriani, N., & Suryadi, S. (2024). The Effect of Learning Method and Self-Confidence on Student Learning Outcomes. *IJORER : International Journal of Recent Educational Research*, *5*(3), 733–747.

https://doi.org/10.46245/ijorer.v5i3.604

Ayomsari, S. W., & Azizah, N. (2024). A Case Study on the Implementation of Inclusive Education for Hearing-Impaired Students in Primary Schools. *Jurnal Ilmiah Sekolah Dasar*, *8*(4), 728–738. https://doi.org/10.23887/jisd.v8i4.86785

Bansong, K., Poopatwiboon, S., & Sukying, A. (2023). The Effects of Multimodal Teaching on English Vocabulary Knowledge of Thai Primary School Students. *Journal of Education and Learning*, *12*(6), 46. https://doi.org/10.5539/jel.v12n6p46

Berliana, A. B., & Nugraha, S. P. (2024). KEEFEKTIFAN PELATIHAN GURU TAHU UNTUK MENINGKATKAN TEACHER WELL-BEING PADA GURU SEKOLAH DASAR INKLUSI. *JIP (Jurnal Intervensi Psikologi)*, *16*(1), 43–62. https://doi.org/10.20885/intervensipsikologi.vol16.iss1.art4

binti Nor Rashid, N. A. A., Asaari, A., & Mohd Rashid, S. M. (2024). Assistive Technology for The Deaf: A Literature Review. *International Journal of Academic Research in Business and Social Sciences*, *14*(2). https://doi.org/10.6007/ijarbss/v14-i2/20828

Birinci, F. G., & Sariçoban, A. (2021). The effectiveness of visual materials in teaching vocabulary to deaf students of EFL. *Journal of Language and Linguistic Studies*, *17*(1), 628–645. https://doi.org/10.52462/jlls.43

Brinkmann, S., & Kvale, S. (2015). *InterViews: Learning the craft of qualitative research interviewing* (3rd ed.). Sage

Cahya, N., & Churnia, E. (2026). Communication Anxiety and Speaking Performance in EFL Learners: A Systematic Review of Counseling and Pedagogical Strategies. *The Indonesian Journal of Educational Counseling* (Vol. 10, Number 1). https://doi.org/10.30653/001.2026101.652

Charles, J., Bali, T., & Sungwa, R. (2024). Enhancing Engagement of Hearing-impaired Pupils in Inclusive Tanzanian Classrooms through Teaching and Learning Materials. *DIB JOURNAL*, *27*(1), 2024.

Cong, W., & Li, P. (2022). The Relationship Between EFL Learners' Communication Apprehension, Self-Efficacy, and Emotional Intelligence. *Frontiers in Psychology* (Vol. 13). Frontiers Media S.A. https://doi.org/10.3389/fpsyg.2022.847383

Creswell, J. W. (2013). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches* (3rd ed.). SAGE.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE.

Crispel, O., & Kasperski, R. (2021). The impact of teacher training in special education on the implementation of inclusion in mainstream classrooms. *International Journal of Inclusive Education*, *25*(9), 1079–1090. https://doi.org/10.1080/13603116.2019.1600590

Despian Nurhidayat. (2024, April 3). Kemendikbud-Ristek Sebut 40.164 Satuan Pendidikan Formal Terdapat Siswa Disabilitas. *Media Indonesia*. https://mediaindonesia.com/humaniora/663079/kemendikbud-ristek-sebut-40164-satuan-pendidikan-formal-terdapat-siswa-disabilitas

Fauziyah, C., Nursalim, M., & Purwoko, B. (2025). EFEKTIVITAS PELATIHAN GURU TERHADAP IMPLEMENTASI PENDIDIKAN INKLUSIF DI PENDIDIKAN ANAK USIA DINI. *JURNAL MADINASIKA Manajemen Pendidikan Dan Keguruan*, *6*(2), 136–145. https://doi.org/10.31949/madinasika.v6i2.13891

Fitria, T. N. (2025). English Language Teaching (ELT) for Special Needs Learners: Strategies and Challenges for Hearing Impairments Students. *Teaching English as Foreign Language, Literature and Linguisticss*, *5*(2), 93–103. https://doi.org/10.33752/teflics.v5i2.9138

Ghufron, S. (2022). Kesalahan Kalimat Pembelajar Bahasa Indonesia: Sebuah Systematic Review. *Jurnal Basicedu*, *6*(2), 1724–1737. https://doi.org/10.31004/basicedu.v6i2.2216

Gunawan, D., Santoso, Y. B., Ridwan, P. G., Meggy, H., Juhanaini, J., Warnandi, N., Putri, N. L., Rahayu, W. D., & Sabriyati, E. (2024). Enhancing teacher competence in identifying student needs through NIMID at inclusive schools. *Inovasi Kurikulum*, *21*(4), 2049–2060. https://doi.org/10.17509/jik.v21i4.74563

Han, R., Alibakhshi, G., Lu, L., & Labbafi, A. (2024). Digital communication activities and EFL learners' willingness to communicate and engagement: Exploring the intermediate language learners' perceptions. *Heliyon*, *10*(3). https://doi.org/10.1016/j.heliyon.2024.e25213

Hartmann, E. (2015). Universal Design for Learning (UDL) and learners with severe support needs. International Journal of Whole Schooling, 11(1), 54–67

Holcomb, L., Dostal, H., & Wolbers, K. (2025). A comparative study of how teachers communicate in deaf education classrooms. *Journal of Deaf Studies and Deaf Education*, *30*(1), 80–93. https://doi.org/10.1093/jdsade/enae043

Iturriaga, C. (2025). The burden of sustaining communication: communication breakdowns experienced by deaf students and their communication support workers in a further education college. *Language, Culture and Curriculum*, *38*(1), 97–112. https://doi.org/10.1080/07908318.2024.2418847

Jumlah Penyandang Kebutuhan Khusus yang Masih Sekolah. (2025). https://data.kemendikdasmen.go.id/dataset/p/peserta-didik/jumlah-penyandang-kebutuhan-khusus-yang-masih-sekolah-2024

Kamila, A. Z., Wahida, H. M., Sabrina, A. P., Wijayanti, D. N., Nabilah, A. Z., Rasyidah, A., Widagdo, A. (2025). Implementasi Pembelajaran Bilingual di Sekolah Dasar: Telaah Metode, Teknik, Strategi, dan Evaluasi Pembelajaran. Jurnal Pendidikan Tambusai, 9(2). https://doi.org/10.31004/jptam.v9i2.27936

Kanwal, A. (2022). Classroom Dynamics in Government Special Education Institutions for Students with Hearing Impairment in Punjab-Pakistan. *Journal of Development and Social Sciences*, *3*(III). https://doi.org/10.47205/jdss.2022(3-iii)81

Katz, J., & Sokal, L. (2016). Universal design for learning as a bridge to inclusion: A qualitative report of student voices. International Journal of Whole Schooling, 12(2), 36–63

Keerthan K, S., Gunjawate, D. R., Ravi, R., & Kumar, K. (2025). Exploring teacher knowledge and attitudes towards the inclusion of children with hearing impairment in mainstream education- A systematic review. In *International Journal of Pediatric Otorhinolaryngology* (Vol. 190). Elsevier Ireland Ltd. https://doi.org/10.1016/j.ijporl.2025.112255

Kiliç, M. (n.d.). *Vocabulary Knowledge as a Predictor of Performance in Writing and Speaking: A Case of Turkish EFL Learners*.

Kirani, H. P., & Nuroh, E. Z. (2025). English Teacher Experience in Using Digital Media during Teaching English at Islamic Junior High School in Pasuruan. *Tell : Teaching of English Language and Literature Journal*, *13*(1). https://doi.org/10.30651/tell.v13i1.25797

Kurniati, D., Zamroni, E., Utomo, S., Lestari, I., & Espejo Mirana, A. (2025). Research Trends on Parental Involvement in Inclusive Education and its Implications for Inclusive Education Programs: A Bibliometric Analysis. *QALAMUNA: Jurnal Pendidikan, Sosial, Dan Agama*, *17*(1), 43–62. https://doi.org/10.37680/qalamuna.v17i1.6438

Lei, H., Cui, Y., & Zhou, W. (2018). Relationships between student engagement and academic achievement: A meta-analysis. *Social Behavior and Personality*, *46*(3), 517–528. https://doi.org/10.2224/sbp.7054

Levine Brown, E., Stark, K., Vesely, C., & Choe, J. (2023). "Acting often and everywhere:" Teachers' emotional labor across professional interactions and responsibilities. *Teaching and Teacher Education*, *132*, 104227. https://doi.org/10.1016/j.tate.2023.104227

Lin, V., Yeh, H. C., Huang, H. H., & Chen, N. S. (2022). Enhancing EFL vocabulary learning with multimodal cues supported by an educational robot and an IoT-Based 3D book. *System*, *104*. https://doi.org/10.1016/j.system.2021.102691

Luangrungruang, T., & Kokaew, U. (2022). E-Learning Model to Identify the Learning Styles of Hearing-Impaired Students. *Sustainability (Switzerland)*, *14*(20). https://doi.org/10.3390/su142013280

Mardiana, A., Muzakki, I., Sunaiyah, S., Ifriqia, F., Tarbiyah, F., & Agama Islam Negeri Kediri, I. (2020). IMPLEMENTASI PROGRAM PEMBELAJARAN INDIVIDUAL SISWA TUNAGRAHITA KELAS INKLUSI IMPLEMENTATION OF INDIVIDUAL LEARNING PROGRAM FOR MENTALLY RETARDED STUDENTS IN INCLUSION CLASS. In *SITTAH: Journal of Primary Education* (Vol. 1, Number 2).

Marschark, M., Spencer, L. J., Durkin, A., Borgna, G., Convertino, C., Machmer, E., Kronenberger, W. G., & Trani, A. (2015). Understanding Language, Hearing Status, and Visual-Spatial Skills. *Journal of Deaf Studies and Deaf Education*, *20*(4), 310–330. https://doi.org/10.1093/deafed/env025

Yunita, V. Subagya, S. (2025). Hambatan Implementasi Pendidikan Inklusif di Indonesia: Analisis Berbasis Survei 156 Sekolah. *Jurnal Basicedu*. https://doi.org/10.31004/basicedu.v9i5.10712

Martínez, I. M., Youssef-Morgan, C. M., Chambel, M. J., & Marques-Pinto, A. (2019). Antecedents of academic performance of university students: academic engagement and psychological capital resources. *Educational Psychology*, *39*(8), 1047–1067. https://doi.org/10.1080/01443410.2019.1623382

Mastropieri, M. A., & Scruggs, T. E. (2010). The Inclusive Classroom: Strategies for Effective Differentiated Instruction (4th ed.). Pearson.

Miles, M. B., Huberman A. M., Saldaña, J. (2018). *Qualitative Data Analysis: A Methods Sourcebook* (3rd ed.). SAGE.

Molapisi, G., & Phasha, N. (2024). Inclusion of learners with mild hearing impairments: Teachers' views on their language, social and academic development. *South African Journal of Education*, *44*. https://doi.org/10.15700/saje.v44ns1a2503

Mukrim, A., & Imran, A. F. (n.d.). THE IMPACT OF MULTIMODAL LEARNING ON VOCABULARY ACQUISITION AMONG EIGHTH-GRADE STUDENTS. *JPBII*, *13*(1), 2615–4404. https://doi.org/10.23887/jpbi.v13i1.4029

N Hutasohit, F. Y., Nabila, A., Dwi Putri, C., Aliyah, N., & Maria Sagala, V. (2025). *50 MOTIVASI BELAJAR ANAK TUNARUNGU DI SEKOLAH INKLUSIF: KAJIAN STUDI LITERATUR* (Vol. 10).

Nabila, Z. Z., Purwati, E., & Megantari, K. (2025). Analisis komunikasi nonverbal guru dalam interaksi siswa di SLB Negeri Jenangan Ponorogo. *Jurnal Komunikasi Universitas Garut: Hasil Pemikiran dan Penelitian.* https://doi.org/10.52434/jk.v11i1.42296

Nurita, D., Amanda, N., Fadhil, N., Hijriati. (2025).

Dampak Pendidikan Inklusif terhadap Perkembangan Sosial dan Akademik Anak Tunarungu. *JOECES, 5(1)*.

Nurmala., Hikmah, D., & Arisandy, E. (2025). IDENTITY CONSTRUCTION AND CLASSROOM PARTICIPATION OF AN EFL STUDENT WITH A HEARING IMPAIRMENT IN AN ISLAMIC-BASED SCHOOL. *Klasikal: Journal of Education, Language Teaching and Science*, *7*.

Pemerintah Penuhi Hak Penyandang Disabilitas di Indonesia. (2023). https://www.kemenkopmk.go.id/pemerintah-penuhi-hak-penyandang-disabilitas-di-indonesia

Penuhi Hak Pendidikan Anak Melalui Pendidikan Inklusif. (2021). https://ditsd.kemendikdasmen.go.id/artikel/detail/penuhi-hak-pendidikan-anak-melalui-pendidikan-inklusif

Pérez-Jorge, D., Rodríguez-Jiménez, M. D. C., Ariño-Mateo, E., & Sosa-Gutiérrez, K. J. (2021). Perception and attitude of teachers towards the inclusion of students with hearing disabilities. *Education Sciences*, *11*(4). https://doi.org/10.3390/educsci11040187

Polvanov, J. N. (2023). EFFECTIVE METHODS OF TEACHING HEARING IMPAIRED CHILDREN. *American Journal Of Social Sciences And Humanity Research*, *03*(05), 123–134. https://doi.org/10.37547/ajsshr/Volume03Issue05-22

Prystiananta, N. C., & Noviyanti, A. I. (2025). Enhancing EFL Instruction in Special Needs Education: Integrating Multimodal Digital Tools and Deep Learning Strategies. *Voices of English Language Education Society*, *9*(1), 96–108. https://doi.org/10.29408/veles.v9i1.29411

Putra, R. Y. P., & Suyatno, S. (2021). Independent Character Building of Special Needs Children in Special Elementary School. *Jurnal Kependidikan: Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran Dan Pembelajaran*, *7*(4), 896. https://doi.org/10.33394/jk.v7i4.4064

Rabaika, N. A. K., K., Mahanani, P. A. R., Sa'adati, T. I. (2025). Desain Intervensi Program Pembelajaran Individual (PPI) Siswa Inklusi: Studi Kasus The Intervention Design of Individualized Education Program (IEP) for Inclusive Students: Case Study at SDN. *Happiness: Journal of Psychology and Islamic Science*, *9*(1). https://doi.org/10.30762/happiness.v9i1.2780

Rukmi, N. S., & Khasanah, N. (2020). Code Switching in Indonesia Bilingual Education. *ELTALL (English language teaching, applied linguistics and Literature* (Vol. 1, Number 1).

Salem, K. N., & Yahya, N. Q. (2023). THE EFFECTIVENESS OF DUAL LEARNING STRATEGIES ON LANGUAGE SKILLS OF EFL STUDENTS. *RUSSIAN LAW JOURNAL: XI*.

Sharma, U., Forlin, C., Deppeler, J., & Guang-Xue, Y. (2013). Reforming Teacher Education for Inclusion in Developing Countries in the Asia-Pacific Region. In *Asian Journal of Inclusive Education*. AJIE. http://www.ajie-bd.net

Silfia, P., SPd, N., Moh Rudini SPd Pendidikan Guru Sekolah Dasar, dan, & Madako Tolitoli, U. (2025). *STRATEGI PEMBELAJARAN INKLUSIF UNTUK MEMENUHI KEBUTUHAN BELAJAR SISWA BERKEBUTUHAN KHUSUS DI SDN 6 BOKAT* (Vol. 10).

Surayatika, D. (2019). Students' Perception of Teachers' Bilingual Language Use in EFL Classroom. *Global Expert Jurnal Bahasa dan Sastra*, *8*(2). https://doi.org/10.36982/jge.v8i2.963

Suryanto, J., Rachmawati, B. F., Saefurrohman, S., & Sorohiti, M. (2025). Inclusive education: English teachers' challenges and strategies for hearing-impaired students in Indonesia. *JEES (Journal of English Educators Society)*, *10*(2), 225–235. https://doi.org/10.21070/jees.v10i2.1970

Susanti, S., Khairiah., Hanum, H., Purba, P., Gultom, W. (2024). Faktor-Faktor Penghambat Kerjasama Orang Tua-Guru dalam Mengontrol Pembelajaran Kelas 2A di MIS Ibnu Halim. *Jurnal Pendidikan Tambusai.*

Ternyata Indonesia Masih Kekurangan 17 Ribu Guru Pendidikan Inklusi. (2025). https://ruangbicara.co.id/ternyata-indonesia-masih-kekurangan-17-ribu-guru-pendidikan-inklusi/#:~:text=Indonesia%20kekurangan%2017%20ribu%20guru%20pendidikan%20inklusif.,pelatihan%20guru%20dan%20dorong%20kolaborasi%20semua%20pihak

Tristani, L., & Bassett-Gunter, R. (2020). Making the grade: teacher training for inclusive education: A systematic review. *Journal of Research in Special Educational Needs*, *20*(3), 246–264. https://doi.org/10.1111/1471-3802.12483

Triviño-Amigo, N., Mendoza-Muñoz, D. M., Mayordomo-Pinilla, N., Barrios-Fernández, S., Contreras-Barraza, N., Gil-Marín, M., Castillo, D., Galán-Arroyo, C., & Rojo-Ramos, J. (2022). Inclusive Education in Primary and Secondary School: Perception of Teacher Training. *International Journal of Environmental Research and Public Health*, *19*(23). https://doi.org/10.3390/ijerph192315451

Wainscott, S. D., & Spurgin, K. (2024). Differentiating Language for Students Who Are Deaf or Hard of Hearing: A Practice-Informed Framework for Auditory and Visual Supports. *Language, Speech, and Hearing Services in Schools*, *55*(2), 473–494. https://doi.org/10.1044/2023_LSHSS-22-00088

Yuan, L. (2024). EFL teacher-student interaction, teacher immediacy, and Students' academic

engagement in the Chinese higher learning context. *Acta Psychologica*, *244*, 104185. https://doi.org/10.1016/j.actpsy.2024.104185

Zagona, A. L., Kurth, J. A., & MacFarland, S. Z. C. (2017). Teachers' views of their preparation for inclusive education and collaboration. *Teacher Education and Special Education*, *40*(3), 163–178. https://doi.org/10.1177/0888406417692969

Zakariyah, M. F., Yulianingsih, W., Hidayah, L. N., & Anisa, A. (2024). Implementation of Universal Design For Learning (UDL) in Digital Learning Media: A Systematic Review. *JPPM (Jurnal Pendidikan* Dan Pemberdayaan Masyarakat), 11(2), 175–188. https://doi.org/10.21831/jppm.v11i2.83253

Zhong, J., Ismail, L., & Lin, Y. (2025). Investigating EFL students' engagement in project-based speaking activities: from a multi-dimensional perspective. Frontiers in Psychology, 16. https://doi.org/10.3389/fpsyg.2025.1598513