

THE INTEGRATION OF AI-GENERATED CONTENT IN ENGLISH LISTENING INSTRUCTIONS: A PERCEPTION STUDY

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Abstrak

Penelitian ini bertujuan untuk menyelidiki persepsi guru dan siswa terhadap integrasi konten yang dihasilkan oleh Artificial Intelligence (AI) dalam pembelajaran mendengarkan bahasa Inggris. Penelitian ini menggunakan pendekatan kualitatif deskriptif yang dilaksanakan di sebuah sekolah menengah atas negeri. Peserta penelitian terdiri dari seorang guru bahasa Inggris dan tiga siswa kelas sebelas yang terlibat dalam pembelajaran mendengarkan bahasa Inggris yang diintegrasikan dengan konten yang dihasilkan oleh Artificial Intelligence (AI). Data dikumpulkan melalui wawancara semi-terstruktur dan observasi kelas dengan menggunakan catatan lapangan untuk memperoleh informasi mendalam mengenai pengalaman dan persepsi para peserta. Data dianalisis menggunakan analisis tematik kualitatif untuk mengidentifikasi tema-tema utama yang muncul dari data wawancara dan observasi. Temuan menunjukkan bahwa integrasi konten yang dihasilkan AI dalam pembelajaran mendengarkan bahasa Inggris membantu guru merancang kegiatan mendengarkan yang lebih relevan dengan konteks sehari-hari siswa serta meningkatkan keterlibatan siswa selama pembelajaran mendengarkan.

Kata kunci: Artificial Intelligence (AI), persepsi dalam pembelajaran, mendengarkan.

Abstrak

This research aims to investigate teacher's and students' perceptions of the integration of AI-generated content in English listening instruction. The research employed a descriptive qualitative approach conducted at a regional senior high school. The participants consisted of an English teacher and three eleventh-grade students who were involved in English listening instruction integrated with AI-generated content. Data were collected through semi-

structured interviews and classroom observations using field notes to obtain in-depth information about the participants' experiences and perceptions. The data were analyzed using qualitative thematic analysis to identify key themes emerging from the interview and observation data. The findings indicated that the integration of AI-generated content in English listening instruction assisted teachers in designing listening activities that were more relevant to students' daily contexts and increased students' engagement during listening instruction.

Keywords: Artificial Intelligence (AI), listening instruction, perception.

Introduction

Listening is a fundamental skill in learning English as a foreign language because it provides learners with essential language input, including pronunciation, vocabulary, and meaning in communication. As noted by Richards (2007), listening serves as the primary source of input that supports the development of other language skills. However, successful listening is not a simple process. Goh and Vandergrift (2022) explain that learners must integrate bottom-up processes (such as recognizing sounds, words, and grammatical structures) with top-down processes (such as using background knowledge and context). In practice, many students still face serious difficulties, including limited vocabulary, unfamiliar accents, and the fast speed of spoken English (Brown, 2016; Pham & Le, 2025). These challenges often lead to reduced comprehension and loss of concentration during listening activities, particularly when the input does not match students' level or experiences.

One major issue lies in the nature of listening instructions used in classrooms. In many cases, textbook-based listening instructions are too general, culturally distant, or lack clear situational context, making it difficult for students to imagine who is speaking, where the conversation takes place, and why it occurs. This lack of clarity reduces comprehension because students cannot effectively apply top-down listening strategies. In contrast, contextual listening instructions are designed to reflect students' real-life situations, such as school activities, local culture, or daily interactions, making the content more familiar and meaningful. According to Elaine B. Johnson (2002), contextual learning helps students connect academic content with real-world experiences, thereby improving understanding. In the context of this research, which was conducted at SMA Negeri 1 Hulu Sungai, students often relied on textbook-based listening instructions that did not reflect their local environment or daily communication practices. As a result, they experienced difficulties relating to the content, even when the language level was appropriate. This condition

indicated the need for more contextualized listening instructions that were relevant to students' backgrounds.

Recent developments in Artificial Intelligence (AI) offer promising solutions to this issue, as AI can generate customized and contextually relevant listening instructions. Studies such as Huda et al. (2025), Loebis (2025), and Huang et al. (2023) show that AI-supported learning can improve students' engagement and listening performance by providing adaptive and interactive content. Similarly, research by Kohnke et al. (2023) highlights that AI tools enable teachers to design materials tailored to students' needs and contexts. However, despite these advancements, there is still a clear research gap. Most previous studies focus on the effectiveness of AI tools in general language learning, rather than specifically examining AI-generated contextual listening instructions. Furthermore, limited research explores both teachers' and students' perceptions simultaneously, especially in real classroom settings at the secondary school level. Therefore, this research aims to fill this gap by investigating both teacher and students' perceptions of AI-generated in English listening instruction at SMA Negeri 1 Hulu Sungai. By doing so, this research provides a more comprehensive understanding of how AI can be effectively integrated into listening pedagogy.

Method

A qualitative approach was used in this study. According to Creswell and Creswell (2023), a qualitative approach is a research strategy used to investigate and interpret meanings constructed by individuals or collective concerning social and human phenomena. This research adopted a qualitative descriptive design to investigate teacher's and students' perceptions of contextual English listening instruction developed through Artificial Intelligence (AI). The research was conducted at SMA Negeri 1 Hulu Sungai, involving one English teacher and twenty eleventh-grade students who were selected through purposive sampling based on criteria levels of academic competence: high, medium, and low achievers. Among these participants, three students were chosen for interviews because they had direct experience with AI-generated listening instruction. Data were gathered through semi-structured interviews and classroom observations, supported by interview guidelines, audio recordings, and field notes to obtain detailed insights into participants' perspectives, classroom environments, interactions, and learning experiences (Kallio et al., 2016; DeJonckheere & Vaughn, 2019). To ensure trustworthiness (Lincoln & Guba, 1985), credibility was established by comparing the findings obtained from interviews and observations through data triangulation, while

consistency was maintained through careful documentation and systematic data management. The collected data were then analyzed using thematic analysis based on the six-phase framework proposed by Braun and Clarke (2006). The analysis began with data familiarization through transcription and repeated reading of the interview data. Next, initial codes were generated from relevant data extracts and organized into broader categories to identify potential themes. These themes were subsequently reviewed, refined, defined, and named to ensure that they accurately represented participants' perceptions and experiences. In addition, observational data and field notes were analyzed descriptively to provide contextual support and enrich the interpretation of the findings. Finally, the results were organized into a coherent report to present a comprehensive understanding of teachers' and students' perceptions of AI-generated listening instruction.

Findings and Discussion

The findings of this research, obtained through thematic analysis (Braun & Clarke, 2006) of semi-structured interviews and classroom observations, revealed various perceptions from both the English teacher and students regarding the implementation of AI-generated contextual English listening instruction. The findings regarding teacher's perceptions were analyzed into three themes:

Findings

AI as a Facilitator for Contextual Material Development

Teacher's perceive AI as a tool that simplifies the development of listening instructions, particularly in generating audio and adapting content to the learning context. The use of AI allows teacher to produce instructions that are more flexible and aligned with students' needs, so it supports more effective classroom practices. This perception is reflected in the teacher's response who emphasized that AI was highly beneficial in supporting the integration of local cultural content into learning, and the teacher also noted that AI facilitates the process of generating listening audio more efficiently. These responses indicate that AI not only supports material development but also enhances contextual relevance in language learning.

Enhanced Student Engagement

Students demonstrate higher levels of participation, increased attention, and stronger emotional engagement during the learning process, particularly when the listening instructions are delivered through interactive, technology-based approaches. This is reflected in the teacher's observation , who indicate that during the taught process students tend to show greater interest in the use

of new media and local-based listening instructions. In addition, the teacher noted that students became more active and engaged, especially when the learned content was closely related to local cultural contexts. These findings suggest that the integration of relevant and technology-supported listening instructions plays a significant role in enhancing student engagement.

Limitations and Support Needs in Listening Instruction

Despite its advantages, several challenges in implementing AI were identified by the teacher. The teacher indicated that while adjusting the level of speech in the listening instruction is relatively manageable, technical issues such as unstable internet connection and electricity remain the most significant obstacles, and limitations in device availability may also affect the smooth implementation of AI-based learning. Furthermore, the teacher emphasized the need for professional development, particularly in terms of training and improved infrastructure, to support the effective integration of AI in the classroom, and noted that the generated listening instruction still requires adjustment in terms of vocabulary level and overall difficulty to better match students' proficiency.

The findings regarding students' perceptions were analyzed from data of interviews and have four dimensions:

AI-generated Content Enhances Students Listening Skill

This theme indicates that AI-generated contextual content enhances students' understanding as they are closely related to familiar situations. As a result, students are able to understand the content more easily and focus more on linguistic aspects rather than interpreting the context. This is reflected in students' responses. S1 indicated that the materials represent real-life situations within their environment. Similarly, S2 emphasized that the materials are highly relatable and make English feel more meaningful and applicable in real-life contexts. In addition, S3 noted that the inclusion of familiar places facilitates visualization, which supports their understanding of the content. These responses suggest that contextual familiarity plays a significant role in improving skill.

Increased Motivation and Engagement

This theme highlights that the use of relatable materials enhances students' motivation and engagement in the learning process. As a result, students become more active, contributing to a more interactive and enjoyable classroom atmosphere. This is reflected in students' responses. S1 indicated that the materials were enjoyable because they were relatable and less monotonous. Similarly, S2 expressed a sense of excitement and satisfaction, noting that the

use of AI-generated materials made the learning experience more engaging than expected. In addition, S3 reported initial curiosity, which later developed into a positive learning experience, emphasizing that the classroom atmosphere felt different from conventional lessons. These responses suggest that the integration of relatable and technology-supported materials can foster positive emotional engagement and active participation.

Perceived Benefits and Limitations

This theme reflects students' overall evaluation of the materials. On the one hand, students reported benefits such as improved confidence and better understanding; on the other hand, they also suggested some improvements for future use. Students indicated that the materials increased their confidence (S2), while (S3 explained that they felt more positive and were no longer afraid of English. In addition, (S1) suggested that the materials still need improvement in terms of more natural voices and longer duration.

Challenges in Traditional Listening

This theme shows that students initially experienced difficulties in listening due to unfamiliar vocabulary, fast speech, and irrelevant materials. Moreover, textbook-based materials were perceived as boring and disconnected from real-life contexts, therefore reducing students' motivation. Students reported that listening was quite difficult because they still needed to adapt to a foreign language (S1), while others mentioned that the materials felt boring, repetitive, and not connected to their daily lives, which reduced their motivation (S2). In addition, some students perceived the materials as too textbook-based and not relatable, which led them to lose interest and even skip the activity (S3).

Discussion

AI as a Facilitator for Contextual Material Development

This result is in line with Sabir et al. (2026), who state that AI can support teachers in developing learning instructions that are adaptable to students' proficiency levels and learning needs. It is also supported by UNESCO (2023), which emphasizes that generative AI can assist educators in creating flexible and context-sensitive instructional materials. In this context, AI helps simplify the development of listening instruction by facilitating audio generation and enabling the integration of contextual content that is relevant to students' learning environment.

Enhanced Student Engagement

This perspective is consistent with Fauzi et al. (2024), who reported that the use of AI-based technology in listening instruction can enhance students' engagement and participation. Similarly, Liang et al. (2023) found that AI-

supported learning contributes to higher levels of cognitive engagement. Getenet et al. (2024) also suggested that students who have positive perceptions of digital technology tend to be more actively involved in learning activities. Furthermore, Lin et al. (2024) emphasized that technology-enhanced learning environments can increase students' attention and motivation. These studies indicate that the integration of interactive and technology-supported instruction can promote greater student involvement in the learning process.

Limitations and Support Needs in Listening Instruction

This is similar to the finding from Bhalke et al. (2026), who emphasize that the successful implementation of AI in education depends on user readiness and adequate support, and with Holmes et al. (2022), who highlight the importance of teacher preparedness and infrastructure. It also aligns with Annisa et al. (2025), who found that students often face difficulties in listening due to limited vocabulary and insufficient listening practice, which may reduce their ability to engage effectively with listening activities and authentic audio materials. The discussion regarding students' perceptions were analyzed from data of interviews have four dimensions:

AI-generated Content Enhances Students Listening Skill

This responses is supported by Azhari and Hashim (2025), who argue that authentic and contextualized materials facilitate comprehension because they are closely connected to students' real-life experiences. Similarly, Gilmore (2007) emphasizes that authentic materials promote understanding by providing meaningful and relatable contexts. In this regard, AI-generated contextual listening materials can support students' comprehension by presenting familiar situations that enable them to focus more on understanding the language and content.

Increased Motivation and Engagement

This indicate is consistent with recent studies. (Wei, 2023) found that AI-based language instruction significantly enhances students' motivation and engagement. Similarly, Liu et al. (2024) emphasized that enjoyment plays a crucial role in increasing students' participation in AI-mediated learning. Furthermore, Zhai et al. (2024) highlighted that AI-supported learning fosters positive emotional engagement, while Zhang (2024) demonstrated that AI tools can enhance active participation and learner engagement in language classrooms.

Perceived Benefits and Limitations

This perception aligns with previous studies. Abdellatif et al. (2024) suggested that AI technology can enhance students' performance and

confidence in language learning, although its implementation still requires continuous improvement. Likewise, Huang et al. (2023) noted that AI provides considerable benefits for learning outcomes despite challenges related to content quality and technological constraints. In addition, Chen et al. (2022) emphasized that AI-supported personalized learning can strengthen students' understanding and increase their confidence during the learning process.

Challenges in Traditional Listening

This perception is in line with previous studies. Hadijah and Shalawati (2017) reported that students' listening difficulties are often influenced by fast speech and limited vocabulary. Likewise, Renandya and Farrell (2019) emphasized that unfamiliar vocabulary, speech rate, and a lack of contextual relevance can hinder listening comprehension. In addition, Siegel (2020) argued that less engaging and overly textbook-based materials may reduce students' motivation and participation in listening activities.

Conclusion

In conclusion, this research reveals that the use of AI-generated contextual materials significantly improves English listening instruction for both students and teacher at SMA Negeri 1 Hulu Sungai. From the students' perspective, the use of local content based on Bukit Kuri helps them understand listening materials more easily while increasing their motivation, participation, and confidence during learning activities. However, challenges related to infrastructure, and material quality still need to be addressed. From the teacher's perspective, ChatGPT and Google AI Studio make it easier to develop contextual listening materials, generate audio resources, and integrate local content such as Bukit Kuri into classroom instruction. Despite these benefits, AI cannot replace the teacher's role. Teacher guidance and material evaluation remain important to ensure that AI-generated content is appropriate for students' needs and learning objectives. Overall, the use of ChatGPT and Google AI Studio provides an effective way to make English listening instruction more engaging, meaningful, and relevant to students' local context.

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