

Using AI to Assist Teachers in Designing Listening Tasks for Gifted Students: A Case Study in Vietnamese High School

Abstract

This study investigates how artificial intelligence (AI) can assist Vietnamese educators in designing effective listening tasks tailored for gifted students in English as a Foreign Language (EFL) context. With the increasing integration of AI in educational settings, this paper explores both pedagogical benefits and implementation challenges. The study adopts a case study approach in a high-performing secondary school in Ho Chi Minh City, employing a mixed-methods methodology that includes pre- and post-intervention listening assessments and qualitative teacher interviews. AI tools such as ChatGPT, and voice synthesis applications were employed to design differentiated, interactive listening tasks. Results indicate significant improvement in students' inferential and critical listening skills, as well as increased engagement and autonomy in learning. Teachers also reported that AI-supported tools enhanced their task design efficiency and creativity. This research offers pedagogical implications for leveraging AI to support gifted language learners in Vietnam and outlines future directions for AI-integration in task-based EFL education.

Keywords: artificial intelligence, listening tasks, gifted students, EFL, Vietnam, task-based language teaching

1. Introduction

In the era of rapid technological transformation, artificial intelligence (AI) has increasingly become a catalyst for innovation in education. Its integration into language learning, particularly English as a Foreign Language (EFL), has shifted the focus from traditional teacher-centered practices to more dynamic, personalized, and adaptive learning environments (Ahmadi, 2018; Kim, 2020). AI tools now support a range of language skills, including reading, writing, speaking, and notably listening—an area often underemphasized in classroom instruction despite being critical for language proficiency (Gilakjani, 2016; Hamouda, 2013).

Listening comprehension, especially in EFL contexts, is not merely the passive reception of sound but an active process involving prediction, interpretation, and synthesis of auditory input (Du & Man, 2022). Gifted students—those who demonstrate advanced cognitive abilities and language acquisition skills—require listening materials that are challenging, context-rich, and cognitively engaging (Boglarka & Boglárka, 2023). However, in many Vietnamese classrooms, listening tasks remain simplistic, heavily scripted, and exam-focused, offering little room for deeper linguistic engagement or critical thinking (Tuong & Dan, 2024). This mismatch often results in gifted learners becoming disengaged or under-stimulated, limiting their potential for advanced language development.

Gifted students in Vietnam's EFL programs frequently find themselves navigating curricula designed for the average learner, which often lack the intellectual complexity or adaptability needed to sustain their engagement. Conventional listening assessments, typically featuring predictable dialogues, fixed question formats, and limited linguistic variation, are ill-equipped to foster the advanced interpretive skills these learners possess (Field, 2008). Such assessments not only risk underestimating the learners' abilities but may also hinder their motivation and linguistic development by failing to provide appropriate cognitive stimulation (Graham, 2006).

In contrast, listening proficiency for gifted learners encompasses far more than surface-level comprehension. It requires the ability to process spontaneous speech, interpret cultural nuances, recognize implied meanings, and adapt to unfamiliar accents, all in real time. Gifted EFL students in Vietnam, especially those preparing for international study or high-stakes competitions, need opportunities to sharpen these advanced competencies within meaningful and challenging contexts.

Vietnam's national education reforms emphasize competency-based learning and the use of digital tools in classrooms (MOET, 2020), yet most teachers still face practical barriers in implementing differentiated instruction. These challenges include limited training in designing listening tasks, lack of time, and insufficient resources tailored for advanced learners (Ghamry, 2020; Al-mawaly & AL-Jamal, 2022). In this context, AI offers a promising solution. Applications such as ChatGPT, Duolingo, and voice synthesis technologies can assist teachers in generating content with varied complexity, authentic language input, and real-time feedback, thereby aligning with the instructional needs of gifted students (Bibauw et al., 2022; Abdalkader, 2023).

While studies have shown that AI tools can improve general EFL listening comprehension (Alrasheedi, 2024; Ghoneim & Elghotmy, 2021), few have focused on how AI can be harnessed by teachers to design custom listening tasks for high-ability learners. Moreover, little is known about how such integration would function in the Vietnamese educational context, where classroom diversity and exam pressures still shape instructional priorities.

This is where Artificial Intelligence (AI) offers a transformative advantage. AI's ability to deliver adaptive, individualized experiences means that listening assessments no longer need to follow a static blueprint. With AI-powered tools, assessments can dynamically evolve based on the learner's response patterns, offering either increased linguistic complexity or deeper inferencing tasks as appropriate (Weng et al., 2020). For example, if a gifted student shows mastery of literal comprehension, the system can automatically present an idiomatic dialogue in a non-standard English accent, prompting abstract thinking and intercultural interpretation.

Moreover, AI helps overcome common barriers in Vietnam's public school system, such as large class sizes and limited instructional time. While teachers may struggle to provide tailored feedback to every student, AI tools can analyze learner responses in real time, provide immediate and granular feedback, and suggest personalized listening pathways that emphasize growth over rote testing (Chen et al., 2021). This not only supports differentiated assessment but also fosters self-directed learning, a trait often associated with gifted language learners.

By changing listening from passive reception to active, intellectually rich engagement, AI aligns well with the broader goals of gifted education reform in Vietnam. It enables schools to push past rigid test structures and design fluid, flexible listening tasks that genuinely reflect learners' potential.

Therefore, this study aims to explore the role of AI in assisting Vietnamese EFL teachers in designing effective listening tasks for gifted high school students. The research examines how AI tools influence the quality of task design, the listening performance of gifted learners, and teacher perceptions of AI integration. By situating the study in a real-world educational setting in Vietnam, the research contributes to both the theoretical understanding and practical application of AI in differentiated EFL instruction.

2. Literature Review

2.1 Gifted Students and Listening in EFL Contexts

Gifted students in English as Foreign Language (EFL) classrooms are characterized by their heightened linguistic aptitude, rapid language processing, and advanced metacognitive awareness (Boglarka & Boglárka, 2023). They typically seek learning experiences that are intellectually stimulating, novel, and challenging—features that are often absent from conventional listening tasks. In many Vietnamese classrooms, listening instruction tends to prioritize basic comprehension questions based on scripted dialogues from textbooks. These tasks primarily focus on literal recall and lack the complexity required to engage high-ability learners (Nguyen, 2019; Tuong & Dan, 2024).

Research in gifted education emphasizes the importance of differentiated instruction, especially in receptive skills like listening, where tasks should encourage inferencing, critical evaluation, and integration of background knowledge (VanTassel-Baska & Stambaugh, 2005). Authentic materials—such as interviews, podcasts, or spontaneous speech—are particularly effective for gifted learners as they demand greater cognitive flexibility (Gilakjani, 2016). However, the design of such materials requires substantial teacher effort, training, and access to appropriate tools—resources often limited in Vietnam's public school system (Pham, 2021).

The gifted learners are, above all, individuals with unique personalities, interests, and desires. Consequently, these personal unique traits have direct impacts on their learning needs. According to Sayler and Brookshire (1993), one of the earliest indicators for giftedness in children is that they walk and talk at an early age. They also have large and advanced vocabulary, and some started accumulating the large vocabulary at a very tender age. They learn rapidly and easily and read at an early age. These gifted children also demonstrate a great appetite for books and reading and are able to entertain themselves for large blocks of time, reading or staring at a book (an indicator of their interest in the content even before they are able to read by themselves). Furthermore, they are also able to readily retain a large amount of information, to consistently organize, sort, classify and group things, and to name them accordingly, and also possess heightened sense of curiosity (Frasier, Hunsaker, Lee & Mitchell, 1995; Dunn & Price, 1980). All in all, as being summarized by Tuttle and Baker (1980), gifted learners common unique traits are as follows:

- b) Deep understanding of cause and effect relationships;
- c) Quick understanding of similarities, differences and anomalies;
- d) Fluent thinking, generating possibilities, consequences or related ideas;
- e) Flexible thinking, using many different alternatives and approaches to problem solving.

Given the definition and the characteristics of these gifted learners, it is then fair for them to receive education that will meet their unique needs. Research works on gifted learners in mainstream education system found out that their classroom experiences were claimed to be too slow, full of repetitions, focused on memorizing instead of mastering the knowledge, and lacked of opportunity to explore anything out of the syllabus (Abu Yazid, 2014; Kanevsky & Keighley, 2003; Gallagher, Harradine & Coleman, 1997) . As mentioned earlier, gifted learners will not benefit from the traditional teaching approach of “chalk and talk”. Such techniques allow limited amount of information to flow from the teacher to the students, and the flow is very linear in fashion (Grasha, 1996) . This limitation can be frustrating to gifted learners whose capacity to absorb information surpass their normal peers and even average adult. Their continuous hunger for knowledge and they capability to consistently seek new information to meet their level of curiosity demand that we offer them a different kind of teaching and learning experiences. Teachers of gifted learners need to readjust their teaching techniques that might involves the shift of pedagogical paradigm from the traditional approaches to probably one that is electronically or technology- based. Hence, in the era of information and communication technology (ICT), the teaching and learning strategies for gifted learners shall incorporate all of the recent technologies available in order to optimize their potential to the fullest.

2.2 Artificial Intelligence in EFL Learning

Artificial intelligence has shown increasing potential to transform EFL education by offering adaptive, responsive, and personalized learning experiences. AI-powered tools like Duolingo, Elsa Speak, and more recently, ChatGPT, support learners by providing immediate feedback, customizing difficulty levels, and simulating natural language interactions (Kim, 2020; Abdalkader, 2023). These technologies have been particularly effective in improving listening and speaking skills, as they allow learners to control the pace of input, repeat challenging segments, and engage in context-rich listening experiences (Bibauw et al., 2022).

Studies have confirmed that AI tools can significantly enhance listening comprehension among EFL learners. For instance, Alrasheedi (2024) reported improved listening scores in students who used AI-based applications for just six weeks. Similarly, Ghoneim and Elghotmy (2021) observed enhanced learner motivation and reduced listening anxiety when AI support was incorporated into classroom tasks. Although promising, these studies typically focus on general learner populations and often neglect subgroups such as gifted students who may require more intellectually rigorous input.

Moreover, the majority of AI-related research in EFL education focuses on student outcomes, while overlooking the role of teachers as designers and facilitators of AI-enhanced content (Luckin et al., 2016). This is a critical gap, especially in contexts like Vietnam, where curriculum flexibility is limited and teachers are rarely trained to use digital tools for pedagogical innovation (Ghamry, 2020).

2.3 AI-Assisted Task Design and Teacher Support

Task-Based Language Teaching (TBLT) has been widely recognized as an effective approach in second language acquisition, emphasizing meaningful use of language in goal-oriented activities (Ellis, 2003). For gifted learners, task design plays an even more pivotal role, as it must incorporate cognitive complexity and authentic language use. However, designing such tasks can be time-consuming and difficult, particularly for teachers facing time constraints or lacking professional development in instructional design (Tuong & Dan, 2024).

AI tools like ChatGPT can alleviate some of these challenges by generating dialogue-based scenarios, comprehension questions, and follow-up discussion prompts based on user-defined inputs (Fryer et al., 2019). This capability enables teachers to create customized listening tasks that align with learner interests and proficiency levels. For instance, a teacher can use AI to simulate a podcast episode featuring conflicting viewpoints on a social issue—ideal material for gifted learners to practice inference, evaluation, and summarization.

Nonetheless, integrating AI into task design is not without its limitations. Teachers must critically evaluate the content generated, adapt it for classroom contexts, and monitor its alignment with curricular goals. In addition, successful adoption of AI tools depends on teacher confidence,

training, and institutional support (Luckin et al., 2016). Without these, even the most advanced technologies risk being underutilized or misapplied in practice.

There are many scholars who aimed to enhance EFL listening skills. Akdamar and Sütçü, (2021) aimed to examine how language learners' listening skills and attitudes regarding the usage of digital storytelling are affected by digital storytelling. The study included 64 secondary school students in Adana, Turkey. The study used a pretest-posttest control group in a quasi-experimental approach. The research's instruments for gathering data were the learners' attitude scale and the listening comprehension accomplishment test. The findings showed that participants' improvements in listening abilities were statistically significant, and the test group performed better in listening activities than the control group did.

Tai and Chen (2021) conducted a study to examine how mobile virtual reality (MVR) can aid in the development of EFL listening comprehension. Seventy-two Taiwanese seventh graders were divided into experimental and control groups at random. The MVR gamers used a head-mounted display that displayed mobile graphics to play the language learning VR software. The findings showed that the MVR reduced anxiety in apprentices by providing them with access to stimulating, engaging, and immersive virtual settings where they could conduct real-world learning tasks. This helped apprentices improve their listening comprehension.

In sum, while the use of AI in EFL education has demonstrated substantial potential, its application in designing listening tasks for gifted students remains a relatively unexplored but promising frontier. This study seeks to bridge that gap by investigating how AI can be used by Vietnamese teachers to create differentiated, cognitively engaging listening experiences for gifted EFL learners.

2.4 Key AI Technologies for Listening Test Design

The effectiveness of AI-enhanced listening assessments stems from the integration of several advanced technologies. These tools work together to interpret learner performance, deliver complex stimuli, and tailor experiences in real time. For gifted students in Vietnam, this means exposure to listening tasks that are not only challenging but also nuanced, authentic, and intellectually stimulating.

Natural Language Processing (NLP)

Natural Language Processing allows AI systems to understand, analyze, and even generate human language. In listening test design, NLP is used to create contextually rich audio materials, generate follow-up questions, and detect levels of learner understanding through textual or verbal inputs. For example, AI can generate comprehension prompts that involve detecting sarcasm, identifying tone, or inferring cultural references, skills that align with higher-level cognitive processing (Xie & Zhou, 2021).

Natural Readers has a wide range of high-quality voices. Users can search by country to choose an appropriate accent. Previews of each speaker can be listened to using the default text. Natural Readers limits free users to five minutes of audio generation per day. If you use this tool, double check your script before it turning into audio. Otherwise, you might use up your five-minute allowance and need to wait 24 hours to create your next file.

TTS Maker also has a range of speakers and accents, although not quite as many as Natural Readers. However, TTS Maker is free, and doesn't limit users (even free ones) on how much audio they can create each day. There is a limit of 1000 characters per file, which is roughly 150-200 words. That shakes out to about one minute of audio. If this isn't long enough, create multiple audio files and splice these together using free software like Audacity (more on this later).

Eleven Labs perhaps has the most realistic sounding voices, and lets new users create up to 10,000 characters of audio for free (around 10mins worth). After that you'll need to pay or create a new account.

Cereproc has a range of accents, mostly from different areas of the UK. Although Cereproc is a paid service, their website has a free demo which teachers can use to create audio.

Narakeet allows users to create around 100 words (or about 45 seconds) of audio for free. You can do this up to 20 times before being charged.

Murf AI lets users create audio for free. However, you are limited to just 250 characters each time – only around 15 seconds! Unless your students have extremely short attention spans, this probably isn't the best choice.

Speech Recognition

Speech recognition technology enables the AI system to "hear" and evaluate learner responses. When students respond to audio prompts aloud, the system can analyze pronunciation, pacing, stress, and comprehension accuracy. For gifted learners, this opens up possibilities for open-ended responses instead of fixed-answer multiple choice. Tools like Google Speech-to-Text or ELSA Speak allow learners to experiment with fluent, expressive English while receiving immediate corrective feedback (Li et al., 2019).

Adaptive Learning Algorithms

At the core of personalized testing are adaptive learning systems. These algorithms analyze a learner's performance in real time, adjusting question difficulty, speed of audio delivery, and complexity of content. For example, if a learner correctly answers a question involving implied meaning, the system may escalate the next item to require inference based on idiomatic speech or intonation cues. This real-time calibration ensures continuous challenge, which is especially valuable for gifted learners who may otherwise outpace fixed test formats (Chen et al., 2021).

Voice Synthesis and Accent Diversity

Voice synthesis technologies generate human-like audio output from written scripts. AI systems such as Google Cloud Text-to-Speech and Amazon Polly can recreate dialogues in a range of English accents, speech speeds, and emotions. This is especially useful in Vietnam, where students may have limited access to native or near-native spoken English. Incorporating diverse voices ensures greater exposure to regional pronunciation, intonation patterns, and sociolinguistic context, helping learners build adaptive listening skills for real-world communication (Tegos et al., 2022).

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Data Analytics and Feedback Engines

One of AI's most powerful applications is its ability to offer actionable insights. Listening assessments can now be linked to analytic dashboards that track individual learner trends, strengths, and recurring errors. For teachers of gifted students, who often need diagnostic tools to stay ahead of their pupils, this information is critical. It not only enhances intervention strategies but also supports reflective learning through targeted feedback and self-assessment tools (Weng et al., 2020).

2.5 Designing Listening Tests for Gifted Learners: Features and Examples

Creating AI-driven listening assessments for gifted EFL students in Vietnam involves more than just uploading advanced audio. These learners require purposeful, intellectually rich tasks that stretch their interpretive skills, cultural awareness, and linguistic precision. Below are core design features that align with their needs, supported by practical examples.

1. Personalization and Learner Profiling

AI systems can track a learner's listening patterns, pace, and performance history to build a personalized assessment pathway. AI can curate listening content from real UN dialogues or news reports, adjusting the accent, vocabulary load, and speech rate based on the learner's proficiency level.

Example: The system selects a BBC interview about climate diplomacy, slows down the speaker's pace, and embeds comprehension prompts that require predicting diplomatic intentions based on tone and context.

2. Cognitive Challenge Calibration

AI algorithms can increase the cognitive complexity of questions as a student progresses. This means transitioning from literal comprehension to inference, critical evaluation, and sociolinguistic interpretation.

Example: A test might begin with identifying main ideas from a podcast and escalate to asking learners to detect irony or cultural bias in a speaker’s narrative—skills aligned with Bloom’s higher-order thinking domains.

3. Authenticity and Real-World Contexts

Gifted learners thrive on real-life, unscripted materials. AI tools like FluentU or LingQ extract audio from authentic sources—TED Talks, interviews, debates—and pair them with adaptive comprehension questions.

Example: Learners analyze a startup pitch from a Vietnamese entrepreneur in Silicon Valley. They’re prompted to identify persuasive language, assess tone shifts, and hypothesize how different audiences might react.

4. Innovative Task Formats

Rather than relying solely on multiple-choice items, AI makes it possible to design active, exploratory listening tasks. Chatbot simulations, VR-integrated dialogues, and interactive audio mapping all offer dynamic formats.

Example: Using an AI chatbot, a learner engages in a simulated mock interview. The chatbot poses questions in varying accents, prompting the learner to listen, synthesize, and respond with contextual accuracy.

5. Goal-Linked Assessment Paths

Gifted EFL students in Vietnam often prepare for IELTS, international competitions, or academic exchange programs. AI tools can scaffold listening assessments in line with these specific goals—using authentic exam-level materials but adapting them to the learner’s pace.

Example: An AI system offers IELTS listening clips but enriches them with extension tasks like paraphrasing speakers’ intentions, comparing viewpoints, or identifying rhetorical strategies used to influence the listener.

2.6 Addressing Ethical Considerations

The adoption of AI in education must prioritize ethical considerations to protect learner privacy and ensure content integrity.

Data Privacy

AI systems often rely on extensive user data to deliver personalized experiences. However, collecting and storing this data raises concerns about privacy and security. Educators should select tools that comply with privacy regulations, such as the General Data Protection Regulation (GDPR) or the Family Educational Rights and Privacy Act (FERPA). Transparency regarding data use is also critical; learners and parents should understand how their information is being utilized (Baker et al., 2020).

Bias in Content

AI-generated content can inadvertently reflect biases present in the algorithms or training datasets. For example, voice synthesis tools might prioritize certain accents over others, potentially limiting learners' exposure to the linguistic variety found in English. To mitigate this risk, educators should select tools that offer a wide range of voices and scenarios, ensuring learners are exposed to varied speech patterns and contexts (Tegos et al., 2022).

Teacher Oversight

While AI provides valuable support, it is not infallible. Teachers should actively monitor the content and feedback generated by AI tools to ensure accuracy and relevance. For instance, automated feedback might misinterpret nuanced learner responses, leading to confusion. Teacher intervention ensures that errors are addressed appropriately and that learners receive guidance tailored to their needs.

Balancing Automation with Human Interaction

AI tools should enhance, not replace, the human element of teaching. Listening comprehension often involves understanding cultural and emotional nuances that AI may struggle to replicate. By combining AI's efficiency with a teacher's expertise, lessons can maintain a balance between technological innovation and human connection (Chen et al., 2021).

3. Methodology

3.1 Research Design

This study adopted a mixed-methods case study design to explore how artificial intelligence (AI) tools can support teachers in designing listening tasks for gifted EFL students in Vietnam. The case study approach was chosen for its ability to provide in-depth insights into a bounded educational

context (Creswell & Poth, 2018). Quantitative data were used to measure student learning outcomes through pre- and post-tests, while qualitative data were gathered to explore teachers' perceptions and experiences. This triangulation of data sources ensured both breadth and depth of understanding regarding AI's pedagogical role.

3.2 Research Setting and Participants

The research was conducted at a specialized high school in Ho Chi Minh City, known for its English-focused academic stream and gifted education programs. The school was selected due to its curriculum flexibility and willingness to experiment with educational technologies.

Participants included:

- **30 Grade 10 gifted students**, identified by the school's gifted education committee based on academic performance, language aptitude tests, and teacher recommendations.
- **Three EFL teachers** with a minimum of five years' teaching experience and prior exposure to technology-enhanced instruction.

All participants were informed of the research purpose and gave their consent. Ethical approval was granted by the school's administrative board, and all procedures conformed to institutional ethical guidelines.

3.3 AI Tools Used in the Intervention

To support listening task design and implementation, the study employed a suite of AI-powered tools:

- **ChatGPT (OpenAI)**: Used by teachers to generate comprehension questions, conversation prompts, and context-rich dialogues tailored to the students' proficiency and interests.
- **Duolingo for Schools**: Offered adaptive listening practice with gamified tasks to reinforce vocabulary and sentence structure (Mulya & Refnaldi, 2016).
- **NaturalReader AI**: Provided customizable voice synthesis in various accents and speech speeds, allowing teachers to diversify auditory input and simulate real-world English use.

These tools were selected based on their accessibility, relevance to listening instruction, and alignment with Task-Based Language Teaching (TBLT) principles (Ellis, 2003; Fryer et al., 2019).

3.4 Procedure

The study was conducted over five weeks and included four key phases:

1. Pre-intervention Phase (Week 1):

Students completed a standardized listening comprehension test consisting of 25 questions, divided into literal, inferential, and critical categories (based on Bloom's Taxonomy).

2. Teacher Training (Week 1):

Teachers attended a 3-hour workshop on integrating AI tools into TBLT-based lesson planning. They were shown how to prompt ChatGPT for task generation and how to incorporate Duolingo and NaturalReader into their lessons.

3. Instructional Intervention (Weeks 2–4):

Teachers integrated AI-designed listening tasks into regular classroom instruction twice per week. Tasks included scenario-based dialogues, podcast-style role plays, and debate recordings. Students engaged with both AI-generated and teacher-modified content.

4. Post-intervention Phase (Week 5):

Students completed a parallel version of the initial test to assess improvements in listening comprehension. Teachers participated in semi-structured interviews to reflect on their experiences using AI for task design.

3.5 Data Collection Instruments

- **Listening Comprehension Tests:**

The pre- and post-tests were designed to align in structure and difficulty, covering three cognitive domains: literal understanding, inferential reasoning, and critical evaluation. The test format followed the guidelines suggested by Alrasheedi (2024) and Ghoneim & Elghotmy (2021) for evaluating AI-related EFL interventions.

- **Semi-Structured Teacher Interviews:**

Each teacher was interviewed individually for 30–45 minutes using a semi-structured

protocol. Questions focused on ease of use, pedagogical value, challenges, and suggestions for future improvements. Interviews were audio-recorded and transcribed for analysis.

- **Classroom Observations:**

To contextualize data, the researcher observed four lessons per teacher using an observation checklist adapted from Fryer et al. (2019), focusing on student engagement, task difficulty, and technology integration.

3.6 Data Analysis

Quantitative data were analyzed using IBM SPSS Statistics v25. A paired-samples t-test was conducted to determine the statistical significance of changes in students' test scores between pre- and post-intervention. Effect sizes were calculated using Cohen's d to assess the magnitude of observed changes (Field, 2013).

Qualitative data from interviews and observations were analyzed thematically following Braun and Clarke's (2006) six-phase approach. Transcripts were coded inductively to identify recurring patterns related to teacher perceptions, affordances of AI tools, and practical challenges in implementation.

This mixed-methods approach allowed the study to capture both measurable learning outcomes and rich, contextualized teacher experiences, providing a comprehensive understanding of AI's pedagogical potential in gifted EFL settings.

4. Results and Discussion

4.1 Quantitative Findings: Listening Comprehension Improvement

Analysis of pre- and post-test scores revealed significant improvements across all three listening comprehension domains: literal, inferential, and critical. The paired-samples t-test showed statistically significant gains, particularly in inferential and critical comprehension, which were primary targets of the AI-enhanced listening tasks.

Table 1: Pre- and Post-Test Mean Scores (n = 30)

Skill Area	Pre-Test Mean	Post-Test Mean	p-value	Effect Size (Cohen's d)
Literal Comprehension	6.2 (SD = 1.1)	7.4 (SD = 1.0)	0.041	0.62 (moderate)
Inferential Comprehension	5.9 (SD = 1.4)	8.1 (SD = 1.3)	0.003	1.17 (large)
Critical Evaluation	5.6 (SD = 1.5)	8.4 (SD = 1.2)	0.001	1.34 (large)

The most substantial gains were observed in higher-order comprehension skills. These results align with findings from Fryer et al. (2019), who noted that AI-enabled instructional designs promote deeper cognitive engagement when learners interact with problem-solving and context-driven listening content. Similarly, Ghoneim and Elghotmy (2021) demonstrated that AI-assisted materials significantly enhance learners' analytical and interpretative listening abilities.

The large effect sizes in inferential and critical categories suggest that the AI-generated materials provided cognitive challenges well-matched to the abilities of gifted students, thereby stimulating meaningful learning (VanTassel-Baska & Stambaugh, 2005). These gains support the hypothesis that AI tools can aid in the creation of listening tasks that go beyond rote comprehension and foster metacognitive skill development.

4.2 Qualitative Insights: Teacher Experiences and Perceptions

Semi-structured interviews with the participating teachers revealed three major themes regarding their experiences using AI tools for listening task design: enhanced creativity and efficiency, improved learner engagement, and challenges in contextual adaptation.

Theme 1: Enhanced Creativity and Efficiency in Task Design

Teachers reported that AI tools, particularly ChatGPT, significantly reduced the time required to design engaging listening tasks and helped generate diverse content types, including debate scripts, interviews, and story-based audio. One teacher noted:

“Before, I would spend hours writing dialogues. Now, I just describe the scenario, and ChatGPT gives me five versions. I still adapt them, but it saves so much time.”

This observation supports prior research suggesting that AI supports instructional productivity and enables teachers to focus more on task customization and student needs (Bibauw et al., 2022).

Theme 2: Improved Learner Engagement and Autonomy

All teachers agreed that students responded positively to the AI-generated tasks. Many students expressed excitement about hearing different accents, choosing task difficulty, and interacting with personalized audio content.

“The students were more curious and willing to listen again and again. It felt more like a challenge to solve than a typical textbook activity,” another teacher explained.

This aligns with Al-mawaly and AL-Jamal’s (2022) findings that AI-enhanced learning environments increase motivation and learner autonomy—factors crucial for gifted students who often prefer independent exploration and novelty.

Theme 3: Challenges in Adaptation and Teacher Confidence

Despite overall satisfaction, teachers faced challenges in contextualizing AI-generated content to suit local culture, curriculum, and time constraints. There was also initial hesitation in trusting the accuracy and appropriateness of the content, particularly when dealing with sensitive topics or humor.

“Sometimes the examples given by ChatGPT didn’t quite fit Vietnamese classroom culture. I had to carefully edit them.”

Such concerns highlight the importance of human oversight in AI-assisted instruction and echo warnings from Luckin et al. (2016) about ethical and pedagogical challenges in educational AI deployment.

Moreover, while teachers appreciated the power of the tools, they emphasized the need for continued professional development to use them confidently and pedagogically.

4.3 Integration of Quantitative and Qualitative Results

The combination of improved test performance and positive teacher feedback suggests a strong case for using AI tools in listening task design for gifted EFL students. The quantitative results confirm that AI-enhanced instruction leads to measurable improvements in higher-order comprehension. Meanwhile, qualitative findings indicate that these improvements were facilitated by increased engagement, task variety, and instructional efficiency.

However, the data also underscore the necessity for thoughtful integration. Teachers must adapt AI outputs, ensure cultural relevance, and align tasks with learning outcomes. Without adequate training and infrastructure, the potential of AI may remain underutilized (Ghamry, 2020; Tuong & Dan, 2024).

5. Conclusion and Future Work

This study explored the role of artificial intelligence in assisting teachers with designing listening tasks tailored for gifted EFL students in Vietnam. Through a mixed-methods case study conducted at a high-performing secondary school, the research found that AI-powered tools—particularly ChatGPT, Duolingo, and NaturalReader—enabled teachers to create more cognitively demanding, engaging, and differentiated listening tasks. These tools not only enhanced instructional efficiency but also positively impacted students’ listening comprehension, particularly in inferential and critical domains.

Quantitative findings demonstrated statistically significant gains in students’ listening skills after a four-week intervention, with large effect sizes in higher-order comprehension tasks. These outcomes suggest that AI-enhanced materials effectively catered to the advanced cognitive abilities of gifted students, who often require enriched content beyond what is provided in standardized curricula (Boglarka & Boglárka, 2023; VanTassel-Baska & Stambaugh, 2005).

Qualitative insights revealed that teachers appreciated the creativity and flexibility AI tools afforded in task design. However, the study also identified challenges, particularly in the contextual adaptation of AI-generated materials and the need for pedagogical training to ensure appropriate use. These findings align with broader literature on AI in education, which cautions

that technology must be integrated thoughtfully and ethically into classroom practice (Luckin et al., 2016; Ghamry, 2020).

From a practical standpoint, the study contributes to the growing discourse on differentiated instruction in Vietnamese EFL classrooms, offering actionable strategies for leveraging AI in under-resourced or time-constrained settings. Given Vietnam's ongoing educational reform agenda, including its emphasis on digital innovation and student-centered learning (MOET, 2020), the integration of AI represents a timely and feasible solution for enhancing instructional quality for gifted learners.

5.1 Limitations

While the findings are promising, this study is not without limitations. First, the research was confined to a single school, limiting the generalizability of results to broader educational settings across Vietnam. Second, the relatively short duration of the intervention (four weeks) may not fully capture the long-term effects of AI-integrated task design. Finally, although teachers were trained briefly, their varied levels of comfort and proficiency with technology could have influenced their use of the tools and the overall fidelity of implementation.

5.2 Future Work

Future research should consider longitudinal studies across multiple schools and provinces in Vietnam to explore sustained impacts of AI-assisted instruction. It would also be valuable to investigate how AI tools can support other language skills—such as speaking, reading, and writing—for gifted learners. In addition, research should examine the role of professional development in enhancing teachers' capacity to critically and creatively integrate AI into instructional design.

Further exploration into the ethical implications of AI in education, particularly concerning student data privacy, cultural relevance, and the balance between automation and teacher agency, is also warranted (Luckin et al., 2016). As AI continues to evolve, developing localized, context-aware AI tools and resources that align with Vietnamese educational goals will be essential for equitable and effective implementation.

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APPENDIX

SAMPLE 1 <https://youtu.be/SieNfciN274?si=0gi5gEAQzH1ZQgWi>

For questions 1–5, listen to the interview and decide whether the following ideas are mentioned by only one of the speakers or by both.

Write:

I – for Interviewer (Stephanie)

T – for Tamara

B – for Both of them

1. A platform where the applicant found the job advertisement
2. The value of showing initiative in the workplace
3. A strategy to follow when arriving late to work
4. The importance of being able to work independently and in a team
5. A reason for the previous employee leaving the position

KEY 1.T 2.B 3. T 4.T 5. I

Sample 2. <https://youtu.be/zSNZjS-M5gs?si=nlkZnulPDQjiVhto>

For questions 1–5, decide whether the following ideas are mentioned by only one of the speakers or by both.

Write:

I – for Interviewer

G – for Gilbert (the social media expert)

B – for Both speakers

1. A comment on how surprised Zuckerberg might have been by Threads' launch numbers
2. A reference to Instagram being the foundation of the Threads platform
3. The idea that Threads might become a safer alternative to Twitter
4. A mention of looking back at the history of social media in a future program
5. The initial sign-up number of 30 million users

KEY 1. I 2. B 3. G 4. I 5. B

Sample 3

Choose the correct letter A, B or C.

1) Movements from which sports were combined with the mind-focusing techniques of early yoga practices?

- A running and boxing
- B gymnastics and wrestling
- C athletics and swimming

2) Which organs in the body especially benefit from yoga?

- A brain and kidneys
 - B liver and bladder
 - C heart and lungs
- 3) What positive effects can yoga stretches have on muscles?
- A improved elasticity
 - B improved strength
 - C improved endurance
- 4) Which condition that is often resistant to treatment can yoga help?
- A serious muscle damage
 - B chronic spinal problems
 - C severe pain in the lower back
- 5) Which element of yogic practice is particularly helpful to people with lung disease?
- A stretching
 - B breathing exercises
 - C meditation

What yoga does to your body and brain

At some point between the 1st and 5th century CE, the Hindu sage Patañjali began to codify the ancient, meditative traditions practiced throughout India. He recorded techniques nearly as old as Indian civilization itself in 196 manuals called the Yoga Sutras. These texts defined yoga as the ‘yoking’ or restraining of the mind from focusing on external objects in efforts to reach a state of pure consciousness.

Over time, yoga came to incorporate physical elements from gymnastics and wrestling. Today, there are a multitude of approaches to modern yoga, though most still maintain the three core elements of Patañjali’s practice: physical postures, breathing exercises, and spiritual contemplation. This blend of physical and mental exercise is widely believed to have a unique set of health advantages. Such as improving strength and flexibility, boosting heart and lung function, and enhancing psychological well-being.

But what have contemporary studies shown regarding the benefits of this ancient tradition? Despite attempts by many researchers, it's tough to make specific claims about yoga's advantages. Its unique combination of activities makes it difficult to determine which component is producing a specific health benefit. Additionally, yoga studies are often made up of small sample sizes that lack diversity, and the heavy reliance on self-reporting makes results subjective.

However, there are some health benefits that have more robust scientific support than others. Let’s start with flexibility and strength. Twisting your body into yoga’s physical postures stretches multiple muscle groups. In the short term, stretching can change the water content of these muscles, ligaments, and tendons to make them more elastic. Over time, regular stretching stimulates stem cells which then differentiate into new muscle tissue and other cells that generate elastic collagen. Frequent stretching also reduces the body’s natural reflex to constrict muscles, improving your pain tolerance for feats of flexibility.

Researchers haven’t found that any one form of yoga improves flexibility more than another, so the impact of specific postures is unclear. But like other low-impact exercises, yoga reliably improves fitness and flexibility in healthy populations. The practice has also been shown to be a potentially powerful therapeutic tool. In studies involving patients with a variety of musculo-skeletal disorders, yoga was more helpful at reducing pain and improving mobility than other forms of low-impact exercise. Adding yoga to an existing exercise routine can improve strength and flexibility for hard to treat conditions like chronic lower back pain, rheumatoid arthritis, and osteoporosis.

Yoga's mix of physical exercise and regimented breathing has proven similarly therapeutic for lung health. Lung diseases like chronic bronchitis, emphysema, and asthma shrink the passageways that carry oxygen, while weakening the membrane that brings oxygen into the blood. But breathing exercises like those found in yoga relax the muscles constricting those passageways and improve oxygen diffusion. Increasing the blood's oxygen content is especially helpful for those with weak heart muscles who have difficulty pumping enough oxygen throughout the body. And for those with healthy hearts, this practice can lower blood pressure and reduce risk factors for cardiovascular disease.

Yoga's most widely celebrated benefit may be the most difficult to prove: its psychological effects. Despite the longstanding association between yoga and psychological wellbeing, there's little conclusive evidence on how the practice affects mental health. One of the biggest claims is that yoga improves symptoms of depression and anxiety disorders. Since diagnosis of these conditions varies widely as do their origin and severity, it's difficult to quantify yoga's impact. However, there is evidence to suggest that yoga can help reduce the symptoms of stress, as well as meditation or relaxation. Research on the effects of yoga is still evolving.

In the future, we'll need larger studies, incorporating diverse participants, which can measure yoga's impact on heart attacks, cancer rates, cognitive function and more. But for now, yoga can continue its ancient tradition as a way to exercise, reflect, and relax.

SAMPLE 4: You will hear a speech about climate change. Listen carefully and complete the gaps with **NO MORE THAN TWO WORDS AND/OR A NUMBER**.

Gap-Fill Exercise:

1. The speaker begins by addressing the audience, stating that they are not an expert but a _____ citizen.
2. They participated in a large-scale march in New York alongside _____ of others worldwide.
3. The speaker compares their job as an actor to how people treat climate change, arguing that it has been viewed as if it were a piece of _____.
4. They emphasize that rising global temperatures have caused intensified _____ and ocean acidification.
5. The melting of ice sheets in Antarctica and Greenland is happening _____ than scientists previously predicted.
6. The speech states that even the _____ recognizes climate change as a serious security threat.
7. The speaker argues that individual actions like changing _____ are not enough to solve the crisis.
8. They call for policies such as placing a price on _____ emissions and stopping fossil fuel subsidies.
9. The speech highlights that _____ energy is both achievable and good for the economy.
10. In the conclusion, the speaker urges world leaders to face the crisis with _____ and honesty.

KEY.

concerned citizen

billions

fiction

droughts

decades ahead/faster
military
light bulbs
carbon
renewable
courage

Thank you, Mr Secretary General, your Excellencies ladies and gentlemen and distinguished guests. I'm honored to be here today.

I stand before you not as an expert but as a concerned citizen – one of the 400,000 people who marched in the streets of New York on Sunday and the billions of others around the world who want to solve our climate crisis.

As an actor, I pretend for a living. I play fictitious characters, often solving fictitious problems. I believe that mankind has looked at climate change in that same way, as if it were fiction, as if pretending the climate change wasn't real would somehow make it go away.

But I think we all know better than that now.

Every week we're seeing new and undeniable climate events, evidence that accelerated climate change is here right now. Droughts are intensifying. Our oceans are acidifying with methane plumes rising up from the ocean floor.

We are seeing extreme weather events and the West Antarctic and Greenland ice sheets melting at unprecedented rates, decades ahead of scientific projections.

None of this is rhetoric and none of it is hysteria. It is fact.

The scientific community knows it. Industry knows it. Governments know it. Even the United States military knows it. The Chief of the US Navy's Pacific Command Admiral Samuel Locklear recently said that climate change is our single greatest security threat.

My friends, this body, perhaps more than any other gathering in human history now faces this difficult but achievable task. You can make history or you will be vilified by it.

To be clear this is not about just telling people to change their light bulbs or to buy a hybrid car.

This disaster has grown beyond the choices that individuals make. This is now about our industries and our governments around the world taking decisive large-scale action.

Now must be our moment for action.

We need to put a price tag on carbon emissions and eliminate government subsidies for all oil coal and gas companies. We need to end the free ride that industrial polluters have been given in the name of a free market economy. They do not deserve our tax dollars. They deserve our scrutiny for the economy itself will die if our ecosystems collapse.

The good news is that renewable energy is not only achievable but good economic policy.

This is not a partisan debate. It is a human one. Clean air and a livable climate are inalienable human rights. And solving this crisis is not a question of politics. It is a question of our own survival.

This is the most urgent of times and the most urgent of messages. Honored delegates, leaders of the world, I pretend for a living but you do not.

The people made their voices heard on Sunday around the world and the momentum will not stop. But now it is your turn. The time to answer humankind's greatest challenge is now.

We beg of you to face it with courage and honesty.

Thank you.

SAMPLE 4. <https://www.npr.org/2024/12/09/nx-s1-5209770/gen-z-digital-compact-cameras-millennials-trendy>

Digital Cameras Make a Retro Comeback Among Gen Z

Compact digital cameras, once widely used in the early 2000s, are reappearing on Gen Z's (1) _____. Like (2) _____, they've become part of a growing nostalgia-driven trend. Freelance reporter Elizabeth Gulino explains that many young people are drawn to the (3) _____ feel of these devices, remembering or discovering a time when digital cameras were used at parties and family gatherings. Unlike smartphones, digital camera photos often have a quality that appeals to a generation looking for something different. Even though these cameras produce (4) _____ images than today's phones, they offer a unique aesthetic and (5) _____. Photographer Casey Fatchett, host of the *Nerdy Photographer* podcast, says Gen Z is tired of over-processed smartphone photos. With digital cameras, "there's (6) _____ for images that feel real," he explains. Fatchett also notes that using a camera with limited storage makes users (7) _____ about the pictures they take. This intentionality contrasts with the endless photo-taking enabled by smartphones. For some, digital cameras represent (8) _____ always being connected. Many Gen Zers have grown up entirely in the smartphone era and see digital cameras as a way to step outside that norm. Camera reviewer Phil Ryan advises buyers to check the lens, test it with (9) _____, and confirm it comes with a charger when buying secondhand.

KEY.

holiday wish lists

low-rise jeans and miniskirts

airy, floaty and ethereal

fewer pixels

more control

a yearning

more intentional and selective

a way to rebel against

an SD card

Sample 5. <https://app.diffit.me/packet/4cb995f2-f025-47fc-bcf1-c453e921e226>

1. According to the text, what is the primary significance of Reunification Day in Vietnam, beyond just a military victory?

A) It primarily celebrates the triumph of communism over capitalism and the defeat of the United States.

B) It marks the end of internal fragmentation and foreign intervention, symbolizing the restoration of national sovereignty and self-determination.

C) It serves as a reminder of the extensive casualties and devastation caused by the conflict between North and South Vietnam.

D) It is mainly a commemoration of Ho Chi Minh's leadership and the historical alliance between Vietnam and China.

2. What detail from the text highlights the ongoing challenges Vietnam faces as a result of the war?

A) The elaborate Reunification Day commemorations with parades and pyrotechnic displays.

- B) The presence of Chinese military representatives at the celebrations.
- C) The active engagement of MAG (Mines Advisory Group) in removing unexploded ordnance, highlighting the lingering threat.
- D) The improved diplomatic relations and bilateral trade between Vietnam and the United States.

3. Based on the text, how has the relationship between Vietnam and the United States evolved since the end of the war?

- A) Diplomatic relations have significantly improved, with bilateral trade becoming economically important to Vietnam.
- B) The United States continues to deploy ordnance on Vietnamese soil for demining operations.
- C) The United States maintains a military presence in Vietnam to ensure regional stability.
- D) There has been no significant change in the relationship; the two countries remain in conflict.

4. According to the text, what concern is emerging for Vietnam, despite improved relations with the U.S.?

- A) The increasing number of casualties caused by unexploded ordnance.
- B) The potential for being drawn into the geopolitical rivalry between China and the United States.
- C) The lack of economic growth due to the lingering effects of the war.
- D) The resurgence of internal fragmentation between the North and South.

5. What detail does the text provide to illustrate the extent of the devastation caused by the war in Vietnam?

- A) The elaborate Reunification Day commemorations held in Ho Chi Minh City.
- B) The presence of representatives from the Chinese military at the celebrations.
- C) The fact that the United States deployed more ordnance on Vietnamese soil than on Japan and Germany combined during World War II.
- D) The improved diplomatic relations and bilateral trade between Vietnam and the United States.

KEY. 1.B 2.C 3.A 4.B 5.C

Sample 5 <https://app.diffit.me/packet/06adcbdd-640b-40d3-9450-6a530096f3dc>

1. According to the text, what role does the orbital frontal cortex play in our food preferences?

- A) It primarily regulates our digestive system based on the food we consume.
- B) It processes sensory information such as taste, smell, and texture, influencing how delicious we perceive food to be.
- C) It controls our long-term memory of past food experiences, shaping our future cravings.
- D) It determines the nutritional content of food, guiding us towards healthier choices.

2. Based on the information presented, how can external factors like labeling influence our perception of food?

- A) Labels have no impact on our perception; taste is purely a biological response.
- B) Labels can alter our neuronal activity and subjective experience of taste, even if the food is identical.
- C) Labels only affect our perception of food if we have prior negative experiences with the food item.
- D) Labels primarily influence our purchasing decisions but do not change how we taste the food.

3. According to Dr. Emily Contois, how has social media impacted our relationship with food?

- A) Social media has made people more aware of the nutritional content of their food.

- B) Social media has shifted the focus from 'you are what you eat' to 'you are what you post,' emphasizing the visual appeal of food.
- C) Social media has decreased the importance of traditional food values and cultural heritage.
- D) Social media has led to a greater emphasis on convenience and affordability in food choices.

4. According to the text, how do genes influence our food preferences and consumption patterns?

- A) Genes have no impact on food preferences; it is purely based on environmental factors.
- B) Genes determine the specific types of food a person will enjoy, regardless of cultural influences.
- C) Genes can make some individuals more responsive to the reward system when eating sugary and fatty foods, influencing their consumption.
- D) Genes only affect how efficiently our bodies process different nutrients, not our preferences for certain foods.

5. Based on the text, what implications does understanding the brain's reward system have for the future of food design and personal dietary choices?

- A) It suggests that we can design low-calorie foods that are still appealing and make informed choices, reducing the control of reward neurons.
- B) It implies that food design will focus solely on maximizing pleasure, regardless of health consequences.
- C) It indicates that personal dietary choices will become irrelevant as food is designed to bypass our natural preferences.
- D) It suggests that our understanding of the brain is irrelevant to food design and personal choices.

KEY 1.B 2.B 3.B 4.C 5.A