

USING CHATGPT TO DEVELOP STUDENTS' IELTS SPEAKING SKILL IN AN IELTS COURSE

Nguyen Kim Phuc*

Faculty of Foreign Languages, Hanoi University of Science and Technology

Nguyen Thuy Trang

University of Languages and International Studies- Vietnam National University

Abstract: *The emergence of ChatGPT is a valuable opportunity to revolutionize the development of teaching and learning materials for language learning. Despite the potential benefits of integrating ChatGPT into IELTS Speaking, there is a notable gap in research regarding its practical application in this domain. Existing studies have not specifically addressed the edges and challenges of applying ChatGPT in IELTS Speaking courses. To apply ChatGPT more effectively in IELTS speaking, we conducted this action research, aiming at shedding light on 1/ students' perspectives towards the application of ChatGPT in their IELTS Speaking skills, and 2/ teachers' reflection on the process of using ChatGPT in developing IELTS Speaking materials. Three collection instruments, namely questionnaire, interview, and teaching journal, were used. Results showed students' remarkably positive responses to ChatGPT application. It not only helped teachers make helpful in-class resources, scaffolding students in terms of outline, vocabulary, ideas, and sample answers, but also provided students with valuable self-study aid, which was claimed to be straight to the point, time-saving, and responsive. Challenges for students and teachers were also revealed since ChatGPT-based materials could be overwhelming for some students unless adapted appropriately by teachers. Regarding suggestions, teachers were advised to select and adapt the materials suggested by ChatGPT carefully and develop the skill to write effective prompts. Additionally, when using ChatGPT for self-study, students should practice their own learning autonomy, paraphrase the suggested ideas, and use the materials as input in a critical way instead of copying the answers and eventually depending on AI.*

Keywords: *ChatGPT, Technology Enhanced Language Learning, Technological Pedagogical Content Knowledge, IELTS speaking, Self-regulated learning*

INTRODUCTION

Artificial Intelligence (AI) is increasingly influencing various aspects of our daily lives, including education. ChatGPT, a form of generative AI, is a powerful web-based language model that generates unique responses to user prompts by processing textual data. This technology has shown great potential in enhancing English language learning by providing interactive and personalized experiences for both teachers and students.

The International English Language Testing System (IELTS) is a crucial test of English proficiency for students aiming to study, work, or migrate to English-speaking countries. The Speaking section of the IELTS exam poses significant challenges, requiring effective communication, a broad vocabulary, and fluency. Traditional preparation methods often fall short in providing the necessary personalized feedback and extensive practice.

Despite the promising potential of ChatGPT, there has been limited research on its application in improving students' IELTS Speaking proficiency. This study aims to fill that gap by exploring the effectiveness of ChatGPT in enhancing English speaking skills for the IELTS exam. By leveraging ChatGPT's capabilities, we seek to provide valuable insights into its role in language learning and better prepare students for the IELTS Speaking exam.

In line with the objective, our research aims to address two key research questions:

1. What are the students' opinions about the use of ChatGPT for IELTS Speaking skill in their IELTS course?
2. What are the teachers' reflections on the process of using ChatGPT in developing teaching and learning materials for IELTS Speaking skill?

LITERATURE REVIEW

Technology Enhanced Language Learning approach

Technology Enhanced Language Learning (TELL) emphasizes the application of digital tools and resources in language instruction and practice (Nurmala et al., 2023). Teachers are recommended to show more creativity and innovation when providing students with educational content (Ningsih & Sari, 2021). To do this, they should integrate technology as it is also a solution to address teaching-related obstacles. As English language learning plays a crucial role in students' communication skills, being widely used not only for academic purposes but also in informal contexts, leveraging technology becomes even more relevant.

The TELL approach offers significant benefits and opportunities for both teachers and students. It not only provides access to authentic language materials and multimedia resources but also helps suggest various interactive activities that can be utilized to support language acquisition and enhance students' engagement. Furthermore, TELL enables students to have a flexible learning experience, which means they can learn at their own pace, anywhere, anytime they want.

Since technology has become increasingly significant in language education, assessing its impact on language learning outcomes is essential to improve current teaching pedagogies. As stated by Rusmiyanto et al. (2023), such technological tools as Artificial Intelligence (AI) can help English language students personalize their learning, hence enhancing their communication skills.

Technological Pedagogical Content Knowledge framework

The Technological Pedagogical Content Knowledge framework (TPCK) provides a theoretical foundation for how teachers can effectively design and implement such technology-driven strategies.

According to Mishra & Koehler (2006), the application of technology in language classrooms requires three main components: content (C), pedagogy (P) and technology (T).

Content knowledge (CK) is the teacher's understanding of the subject matter they teach. In other words, they have to be familiar with the core concepts, theories and relevant principles that they present to students.

Pedagogical knowledge (PK) implies the teacher's thorough understanding of teaching pedagogies, learning processes and the overall aims of education. Teachers must know how to manage the class, plan and execute lessons and assess students appropriately. They should also understand their target students, hence adapting effective teaching methods to accurately evaluate students' comprehension.

Technology knowledge (TK) refers to the teacher's understanding and practice of different technologies including the Internet, applications and other multimedia tools. Having strong TK means that teachers need to learn and adapt to new technologies as they emerge to stay up to date with rapid technological innovations.

In the context of quality teaching, these elements are not isolated from one another but are interconnected, forming the TPCK framework as illustrated in the following diagram:

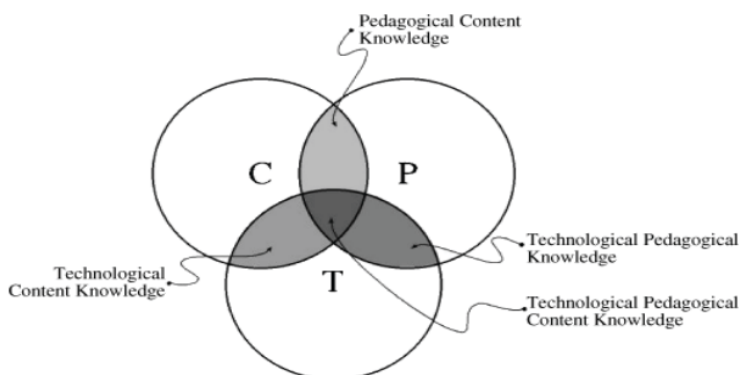


Figure 1. Technological Pedagogical Content Knowledge

(Mishra & Koehler, 2006, p.1025)

There are two opposing views towards this TPCK framework. The traditional perspective asserts that content shapes pedagogical and technological decisions (Koehler & Mishra, 2009) while more modern studies indicate that technological tools can dramatically influence the teaching content and pedagogies (Peruski & Mishra, 2004; Wallace, 2004). In our research, we support the traditional view: we see technology as a tool to enhance the quality of our IELTS Speaking lessons, not a prerequisite to determine the other two elements. This also means that in each of our lessons, the TK requires careful guidance and must align with specific pedagogical objectives as well as teaching content that has been set in advance. It should also support how we aim for students to understand and apply knowledge.

Overview of ChatGPT

ChatGPT is defined as a web-based AI language model that can produce different responses to different users' prompts. It can also analyze textual data and customize specific outputs that are suitable for users of different language proficiency levels (Kostka & Toncelli, 2023). With this powerful ability, ChatGPT provides tremendous implications for educators.

The application of ChatGPT in teaching and learning EFL

ChatGPT is popularly utilized by both EFL teachers and students. For teachers, ChatGPT is used to create their teaching materials such as lesson plans, worksheets and assessment outlines. This software not only helps them save more time but also supports designing content that matches students' proficiency levels and interests better (Kohnke et al., 2023; Baskara & Mukarto, 2023). As for students, ChatGPT is utilized as a practice tool if they want to perform interactive conversations or find vocabulary explanations and grammatical corrections.

However, the significant challenge is whether ChatGPT use can align with specific learning objectives and teaching principles, especially when applied in diverse classroom contexts (Eysenbach, 2023; Kasneci

et al., 2023). As Ali (2023) suggests, to integrate this AI tool effectively, we need to rethink the traditional EFL approaches and try to balance technology utilization and educational goals. For the context of an IELTS Speaking course, objectives like improving fluency, coherence, pronunciation and lexical resources have been addressed through traditional IELTS teaching methods and materials. Teachers are used to textbooks containing clear purposes and “exam preparation”-focused content. When introducing ChatGPT into the course, the dynamic, interactive learning experience that this tool provides may not always align with the content and structure of traditional resources. This raises our curiosity on how ChatGPT can support conventional IELTS teaching practices effectively.

Self-regulated Learning in combination with technology for English Speaking skill practicing

According to Zimmerman (1990), self-regulated learning refers to students’ ability to become mentally active by planning, organizing, controlling, monitoring and evaluating themselves from what they have learned in the learning process. It emphasizes the necessity of students’ responsibility, motivation and individual strategies to comprehend and master the subject that has been studied.

Regarding English speaking skill, suggesting self-regulated learning for students and making them practice inside and outside classrooms can help them understand more about their capabilities, hence making English speaking more effective and enjoyable (Birhanie Aregu, 2013; Mahjoob, 2015; Priego et al., 2015).

There has been quite a few studies promoting the integration of technology tools and self-regulated learning into students’ English Speaking sessions. Aromaih (2021), Menggo et al. (2021) assert that smartphone use provides students with significant benefits, including time and space efficiency, convenient and secure learning. Mobile apps such as Zoom, WhatsApp and Youtube are also suggested as useful digital-based learning softwares since they include audio-visual features (i.e. Youtube videos contain native

speakers’ pronunciation and lip movements) that help set examples for students who want to improve their English Speaking skill (Koo, 2016; Mubarak et al., 2020). For our context, we propose the application of ChatGPT as it offers phonetic transcriptions, explanations of pronunciation rules, and information about English-speaking cultures, which helps improve students’ communicative competence. While this software lacks the visual element, it provides immediate, personalized, and constructive feedback based on each student’s prompts, and also allows students to work at their own pace. By focusing on areas that they need to pay more attention to, students can tailor their learning to their own needs (Hong, 2023).

RESEARCH METHODOLOGY

Research approach

We adopted action research as our research methodology with an in-depth analysis of how to apply ChatGPT to improve speaking skills in an IELTS course. As outlined by Kemmis & McTaggart (1988), action research follows a cyclical model comprising four key phases: planning, action, observation, and reflection. This model is iterative, as the initial cycle often evolves into a continuing spiral of cycles until the desired outcomes are achieved. While this model has faced criticism for being “rigid,” “fixed,” and “prescriptive,” it remains a valuable framework that “summarizes very succinctly” the essential stages of action research (Burns, 2010, p.8)

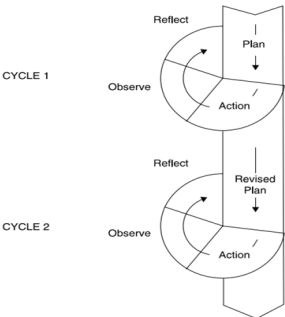


Figure 2. Action Research Cyclical Model
(Kemmis & McTaggart, 1988, as cited in Burns, 2010)

Educational context and participants

Our study was conducted in an IELTS Speaking class containing 14 students at an English center in Hanoi. The participants' English levels range from B1 to B2 according to the Common European Framework of Reference for Languages (CEFR). We decided to choose this class with student levels ranging from B1 to B2 to ensure students had sufficient English competence to exploit ChatGPT not only for in-class learning but also for self-study at home. We wanted to avoid challenges that might arise if students' English proficiency was too low to understand basic communication with ChatGPT when they self-studied at home on their own. In terms of teachers, we worked not only as two participatory action researchers but also as two co-teachers making teaching materials, co-teaching, and reflecting on the teaching practice in this class.

Data collection instruments

The main data collection instruments were surveys, semi-structured interviews, and teaching journals. The combination of different data collection instruments, especially between quantitative (survey) and qualitative ones (semi-structured interviews, and teaching journals) helped triangulate the results and provide a more comprehensive picture of the situation. Surveys were conducted to gather students' general feedback on the integration of ChatGPT into their speaking practice. Throughout the course, teachers maintained teaching journals to document their experiences, observations, and reflections on the use of ChatGPT in the classroom. An extract of the teaching journal can be found in Appendix 6 on page 23. Additionally, after the post-intervention survey, five students were selected for semi-structured interviews to gain deeper insights into their attitudes toward using ChatGPT, its advantages and disadvantages, and their recommendations for improvement. Detailed information about the questionnaire and interview questions can be found in the Appendices at the end of this paper.

Data collection procedure

The study consists of two cycles. The illustration of these cycles, adapted from the cyclical action research model by Kemmis & Mc Taggart (1988) is shown in the following diagram:

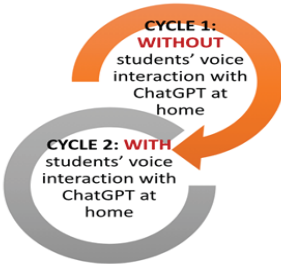


Figure 3. The Cyclical Action Plan for the IELTS Speaking Class

The reflection stage in cycle 1 sets the reasons for our change in plan for cycle 2. After reflection on the action in Cycle 1, we realized the lack of appropriate homework exercise to enhance the quality and time of students' speaking practice at home. Hence, we revised our plan for Cycle 2 in which we instructed the students to use voice interaction with Chat-GPT at home for further practice. Specifically, the students were instructed to ask Chat-GPT to act as a teacher asking some IELTS speaking questions related to the lesson objectives and give detailed comments and suggestions for student improvement, then the students would record the conversation.

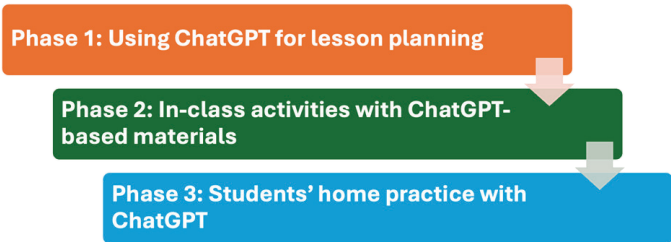


Figure 4. Specific Procedures in Using ChatGPT to Design Learning Materials for Students' IELTS Speaking Lessons

(Plan for Cycle 2)

Figure 4 illustrates a plan to apply ChatGPT to create learning materials and facilitate students’ self-study at home in Cycle 2 of the study. A more detailed description of this plan is demonstrated in Appendix 1 at the end of this paper. Appendix 2 provides a sample prompt for interaction with ChatGPT to create a speaking lesson for a sample lesson.

FINDINGS AND DISCUSSION

Answer to RQ1: Students’ opinions about the use of ChatGPT for IELTS Speaking skill in their IELTS course

Overall, data from the surveys and interviews with the students reveal the students’ perspectives about many advantages of using ChatGPT for improving IELTS Speaking skills in their IELTS course, yet some shortcomings in the process of using Chat-GPT were also mentioned together with several suggestions.

Advantages

The most striking result was that most of the students mentioned a variety of merits of using ChatGPT for improving IELTS Speaking skills in their IELTS course. Overall positive responses are demonstrated clearly in Figures 5 and 6 below.



Figure 5. Students’ evaluation of the effectiveness of ChatGPT-based materials in helping to improve students’ speaking skills

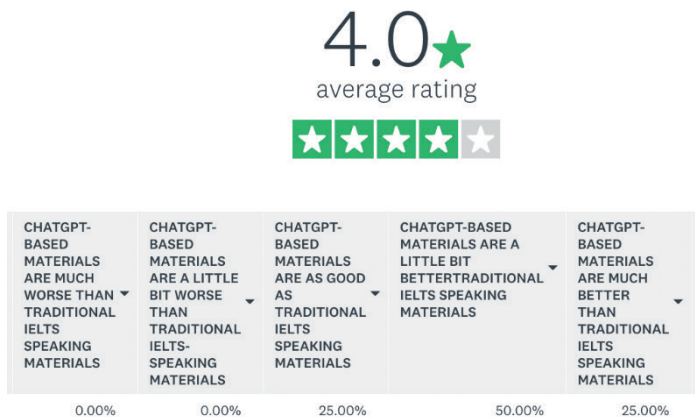


Figure 6. Students’ Comparison between ChatGPT-based Materials and Conventional IELTS Speaking Materials in terms of User-friendliness

The interview data aligns closely with the survey findings. Moreover, the interviewees provided more detailed explanations for their responses and highlighted additional potential advantages that were not captured in the survey.

In the first place, ChatGPT offers benefits when it is used to create in-class learning materials. Its ability to generate helpful learning materials with specific suggestions and input, such as outlines, vocabulary lists, and sample answers directly related to the lesson topic, effectively scaffolds students, particularly those at lower proficiency levels. This support enables students to build confidence and produce their own oral responses with greater ease. Moreover, ChatGPT-based materials can be tailored to meet specific learning needs. As Student 1 pointed out, such materials “could be more detailed and logical and can address the exact needs of students if teachers have the skills to make effective prompts and adapt the materials.” This is similar to Kohnke et al. (2023), which demonstrated that using ChatGPT allows language learners to receive instructions tailored to their proficiency levels, enabling them to engage with content aligned with their interests and cultural contexts. In addition to customization, ChatGPT introduces a broader range of topics and more up-to-date content compared to traditional IELTS textbooks. Student 5

noted that it provides “a wider variety of topics” and includes “more updated, recent information” than conventional materials.

ChatGPT was also perceived as a good self-study tool for students for various reasons. First, ChatGPT-based materials are said to be able to address students’ needs by providing answers that are straight to the point. Second, it is also time-efficient as it automatically synthesizes information to provide a high-quality answer based on big data in the blink of an eye. Hence, students do not need to read many resources to synthesize the information on their own. Third, ChatGPT can give constructive and valuable feedback, especially in terms of lexical resources. According to student 1, when talking with ChatGPT at home, she could have a golden chance of getting valuable constructive feedback and even specific and high-quality suggestions from ChatGPT, especially in terms of word choice and collocations to improve her lexical resource score. Finally, it provides a good chance to practice speaking outside the classroom since students could interact with ChatGPT using spoken language and receive feedback for further practice on their own. Student 2 claimed that he quite liked to practice speaking with ChatGPT via voice interaction since it gave him a sense of talking with a person or an examiner instead of just recording the answer on his own. Figure 7 below also indicates students’ good evaluation regarding the effectiveness of ChatGPT audio interaction.

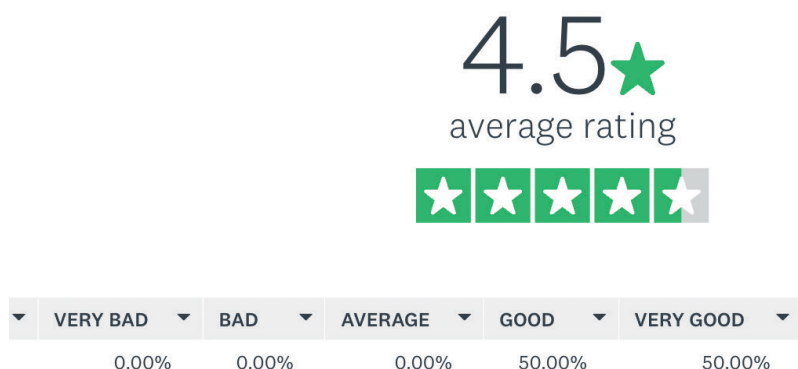


Figure 7. Students’ Evaluation of the Effectiveness of ChatGPT Audio Interaction

These students’ positive experiences consolidate the benefits of integrating technology with self-regulated learning asserted in previous studies, especially when it comes to tailoring students’ learning to personal needs (Hong, 2023) and helping students work on weaknesses at their own pace (Aromaih, 2021; Menggo et al., 2021).

In the third place, many students reported that they were unable to distinguish between materials generated by ChatGPT and those created by teachers or taken from textbooks. This suggests that when adapted effectively by educators, ChatGPT-based materials can match the quality of published resources as perceived by the students (as shown in Figure 8).

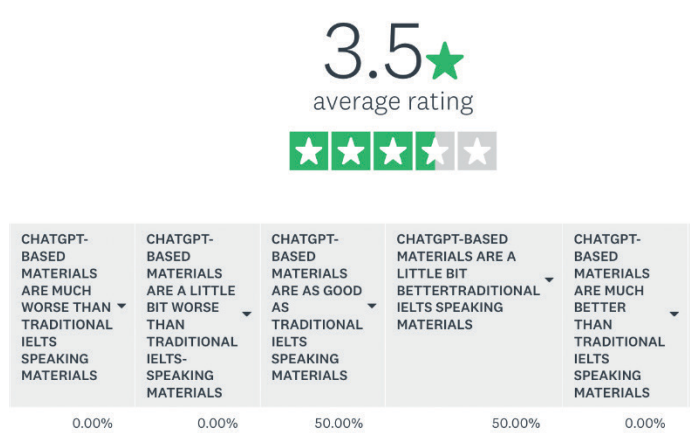


Figure 8. Students’ Comparison between ChatGPT-based Materials and Conventional IELTS Speaking Materials in terms of Effectiveness

Potential drawbacks

While ChatGPT offers various benefits, students revealed several potential drawbacks of its use in both in-class and self-study settings.

One of the primary concerns is that students can feel overwhelmed when too much information is provided at once. This applies to both classroom use and home practice, as the abundance of data from ChatGPT may leave students unsure of how to process or prioritize the material effectively.

Additionally, the tool often generates lengthy responses, which may require both teachers and students to develop the skill of crafting clear and concise prompts to ensure the output is manageable and focused.

For lower-level students, especially ones significantly struggling with pronunciation, ChatGPT's voice interaction feature shows certain limitations. Particularly, Student 3 who is at a B1-B2 English proficiency level and constantly experiences pronunciation and fluency-related difficulties reported that ChatGPT often failed to recognize his speech accurately, making it difficult to maintain effective interaction. This could be because dissimilarly to human teachers who are trained to support different students with their specific weaknesses, ChatGPT lacks the professional pedagogical approaches to address unique challenges faced by lower-level students. The finding aligns with Steiss et al. (2024) emphasizing that human raters performed better than such AI tool regarding the clarity, accuracy and supportive tone.

Another disadvantage is ChatGPT's lack of flexibility during communication. Student 2 explained that when pausing between ideas or recalling vocabulary, the software sometimes misinterpreted these pauses as the end of her responses and immediately provided feedback. This interruption can adversely affect students' train of thought, hence preventing them from expressing the full ideas. Contrastingly, human teachers are likely to encourage students to continue speaking, therefore can maintain the flow of conversation and help students make further progress significantly. While the student did not explicitly share whether she preferred teachers' or ChatGPT's feedback, her experience suggests a consideration regarding which feedback type is more effective in maintaining communication flow. As stated in Solovey (2024), different students may prefer different ways of feedback: some might like ChatGPT's immediate responses, while others appreciate teachers' facilitation thanks to their flexibility and expertise.

Moreover, Su et al. (2023) emphasized that ChatGPT's feedback, though useful, still needs human teachers' clarification. This

consolidates the idea that while ChatGPT can be utilized when teachers are not accessible or when students perform self-regulated learning, its limitations in handling students' unique needs - especially regarding pronunciation difficulties and conversational flexibility - imply the teachers' indispensable role in instructing students effectively.

Technical issues and system errors are another significant limitation. Problems like limited voice interaction capabilities, heavy server loads and occasional disruptions make ChatGPT become time-consuming and less reliable than traditional methods. Some students even showed their lack of trust in teaching and learning content generated by this AI tool. Student 2 shared: "I prefer textbooks to ChatGPT-based materials because I trust textbook authors more". This indicates that traditional resources remain more reliable for many students because of their established credibility.

Suggestions

During the interviews, students provided valuable suggestions for optimizing the use of ChatGPT in both in-class and self-study contexts. They emphasized the importance of teachers possessing the necessary skills and qualifications to adapt and curate the content generated by ChatGPT. This would help prevent the creation of learning materials and sample answers that are overly lengthy and potentially overwhelming for students. Teachers were also encouraged to use ChatGPT as a supplementary tool rather than a primary resource, ensuring that its use aligns with the main textbook to maintain a structured and systematic learning process. A similar suggestion was stated by Dayanghirang & Hernandez (2022), as the researchers emphasized that while technology is an essential tool, teachers must adhere to the core syllabus and learning outcomes to use it effectively. This finding also reinforces the traditional perspective on the use of technology, as mentioned in the literature review: teaching content primarily influences decisions about pedagogy and technology.

Besides, students recommended adopting ChatGPT's vocabulary and ideas as foundational input for creating their own responses. Rather than relying on ChatGPT to the point of copying or memorizing sample answers, learners suggested that they should focus on paraphrasing and building their oral responses from the suggestions provided by the tool. This approach fosters greater independence and critical thinking in their speaking practice. Additionally, Student 2 highlighted the need for teachers to proofread and verify the content generated by ChatGPT. This step is essential to avoid the dissemination of inaccurate information or errors, ensuring the quality and reliability of the materials used in lessons. By addressing these suggestions, the integration of ChatGPT into teaching and learning contexts could become more effective and student-centered.

Answer to RQ2: Teachers' reflection on the process of using ChatGPT in developing teaching and learning materials for IELTS Speaking

Teachers' reflections on the use of ChatGPT, as recorded in their journals, revealed insights into both its advantages and challenges. Many of their observations aligned with the feedback provided by students, particularly regarding ChatGPT's effectiveness as a tool for generating vocabulary lists, sample answers for challenging speaking topics, and suggested exercises. This capability made ChatGPT a helpful resource in lesson preparation, particularly for addressing complex topics that might otherwise require extensive effort to develop materials for.

However, teachers noted some drawbacks. One significant challenge was that ChatGPT often generated excessive information, some of which was not directly relevant or appropriate for students. This required teachers to carefully select and adapt the provided content. Teacher 1 reflected that preparing a lesson with ChatGPT could be more time-consuming than planning a traditional lesson. This was attributed to the additional effort needed to refine and organize the materials provided by the tool. Similarly, Teacher 2 emphasized the importance of training teachers to write effective prompts, suggesting that well-

crafted prompts could help produce more targeted and useful content, saving time and effort in lesson preparation.

To streamline the process, teachers recommended using ChatGPT as a supplementary tool rather than relying on it to create entire lesson handouts. Instead, it could be used to enhance existing textbooks by generating extra sample answers, vocabulary lists, or complementary activities. This approach ensures that the lessons maintain a systematic structure while incorporating the flexibility and richness of ChatGPT's resources. Besides, this recommendation aligns with students' feedback about integrating ChatGPT materials with traditional textbooks.

Teachers also reflected on the flexibility needed when incorporating ChatGPT into students' home practice. For higher-level students, ChatGPT's voice interaction feature proved beneficial, allowing them to engage in interactive speaking practice. However, for lower-level students, this method was less effective, particularly for those struggling with pronunciation and fluency. In these cases, teachers suggested providing additional guidance or using alternative methods, such as having students record video responses. This adaptable approach to homework ensures that the use of ChatGPT aligns with students' varying levels and preferences, optimizing their learning experience.

Both students and teachers view ChatGPT as a supportive tool, but the need for teachers' refinement before delivering ChatGPT-generated content to students remains crucial. This perspective aligns with Ulla et al. (2023), who examined the implications and limitations of integrating AI extensively into English language teaching. Their research underscores that while AI tools like ChatGPT can help teachers save time, generate ideas and prepare teaching materials, concerns regarding accuracy, appropriateness and ethics of using ChatGPT-generated content without human review exist. Similarly, findings from Pasquale (2020), Farrokhnia et al. (2023), and Sims (2023) emphasize the importance of a "human-in-the-loop" approach. This concept highlights that: (1) Teachers play a central role in adapting and utilizing ChatGPT-generated

materials effectively; (2) while AI can boost productivity, humans must remain at the core of decision-making processes; (3) integrating AI as a supportive tool, rather than as a replacement for teachers, ensures its meaningful and effective use in the classroom.

CONCLUSION

The results indicated both teachers' and students' positive responses to the application of ChatGPT. It not only helped teachers create useful in-class resources to scaffold students in areas such as outlines, vocabulary, ideas, and sample answers but also provided students with a valuable self-study aid that was described as straightforward, time-saving, and responsive.

However, challenges were also identified. ChatGPT-based materials could overwhelm some students unless appropriately adapted by teachers. In terms of suggestions, teachers were encouraged to carefully select and adapt materials generated by ChatGPT and develop the skill to write effective prompts. Likewise, students using ChatGPT for self-study should cultivate their learning autonomy by paraphrasing suggested ideas and critically using the materials as input, rather than copying the answers and becoming overly reliant on AI.

Regarding limitations, our research includes a small sample size of only 14 student participants, therefore the findings can hardly be generalized and easily adapted into larger and more complex learning environments. The researchers did not aim to make generalizations, but our findings will be transferrable to EFL classes with similar educational contexts. Further research could involve a larger sample size to fill this gap. Furthermore, since our primary focus is exploring students' perceptions towards the application of ChatGPT in providing speaking feedback, we did not investigate students' progress in a quantifiable way. Future research could explore EFL students' actual improvements using more quantitative data collection instruments, contributing to ideal practices for adapting technology into language learning.

REFERENCES

- Ali, J. K. M. (2023). Benefits and challenges of using ChatGPT: An exploratory study on English language program. *University of Bisha Journal for Humanities*, 2 (2), 629-641. Available at: https://www.researchgate.net/publication/372310955_Benefits_and_Challenges_of_Using_ChatGPT_An_Exploratory_Study_on_English_Language_Program
- Aromaih, A. (2021). University EFL learners' attitudes towards using smart phones for developing language learning skills during the Covid-19 pandemic. *Asian EFL Journal*, 28(1.1), 144-160. Retrieved September, 27 2021, from <https://www.asian-efl-journal.com/monthly-editions-new/2021-monthly-edition/volume-28-issue-1-1-february-2021/index.htm>
- Baskara, R. & Mukarto. (2023). Exploring the implications of ChatGPT for Language learning in Higher education. *Indonesian Journal of English Language Teaching and Applied Linguistics*, 7 (2), pp.343-358.
- Birhanie Aregu, B. (2013). Enhancing Self-Regulated Learning in Teaching Spoken Communication: Does It Affect Speaking Efficacy and Performance?. *Electronic Journal of Foreign Language Teaching*, 10(1), pp.96-109. Available at: e-flt.nus.edu.sg/wp-content/uploads/2020/09/v10n12013/aregu.pdf
- Burns, A. (2010). *Doing Action Research in English Language Teaching: A Guide for Practitioners*. Available at: <https://www.routledge.com/Doing-Action-Research-in-English-Language-Teaching-A-Guide-for-Practitioners/Burns/p/book/9780415991452>
- Dayanghirang, R. B. & Hernandez, A. A. (2022). Mobile-based gradebook with student outcomes analytics. *arXiv*. <https://arxiv.org/abs/2202.02915>
- Eysenbach, G. (2023). The role of ChatGPT, generative language models, and artificial intelligence in medical education: A conversation with ChatGPT and a call for papers. *JMIR Publications*, 9. Doi: 10.2196/46885

- Farrokhnia, M., Banihashem, S. K., Noroozi, O. & Wals, A. (2023). A SWOT analysis of ChatGPT: Implications for educational practice and research. *Innovations in Education and Teaching International*. <https://doi.org/10.1080/14703297.2023.2195846>
- Hong, W. C. H. (2023). The impact of ChatGPT on foreign language teaching and learning: opportunities in education and research. *Journal of Educational Technology and Innovation*, 5(1), 37-45. <https://jeti.thewsu.org/index.php/cieti/article/view/103>
- Kasneci, E., Sessler, K., Kuchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., Groh, G., Gunnemann, S., Hullermeier, E. et al. (2023). ChatGPT for Good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*. Doi: 10.1016/j.lindif.2023.102274
- Kemmis, S. & McTaggart, R. (1988). *The Action Research Planner*. Deakin University.
- Koehler, M. J. & Mishra, P. (2009). What is technological pedagogical content knowledge? *Contemporary Issues in Technology and Teacher Education*, 9(1), 60-70.
- Kohnke, L., Moorhouse, B. L. & Zou, D. (2023). ChatGPT for language learning and teaching. *RELC Journal*, 1-14. <https://doi.org/10.1177/003368822311628>
- Kostka, I. & Toncelli, R. (2023). Exploring applications of ChatGPT to English language teaching: Opportunities, challenges and recommendations. *The Electronic Journal for English as a Second Language*, 27 (3), pp.1-19.
- Koo, W. (2016). Usage of smartphone applications: A descriptive study of top 100 U.S. retailers. *International Journal of Interactive Mobile Technologies*, 10(3), 54-58. <https://doi.org/10.3991/ijim.v10i3.5827>
- Mahjoob, E. (2015). Self-regulation and speaking proficiency in Iranian EFL learners. *Journal of Language, Linguistics and Literature*, 1(6), 182-188.

- Menggo, S., Midun, H. & Pandor, P. (2021). Students' digital literacy competence and English study habits. In The 1st International Conference on Education, Humanities, Health, and Agriculture. Universitas Katolik Indonesia Santu Paulus Ruteng. Doi: 10.4108/eai.3-6-2021.2310655
- Mishra, P. & Koehler, M. J. (2006). Technological Pedagogical Content knowledge: A framework for Teacher knowledge. *Teachers College Record*, 108 (6), 1017-1054.
- Mubarak, M. R., Wahdah, N., Ilmiani, A. M. & Hamidah, H. (2020). Zoom cloud meeting: Media alternatif dalam pembelajaran maharah kalam di tengah wabah Virus Corona (Covid-19). *Arabiyatuna: Jurnal Bahasa Arab*, 4(2), 211-226. <https://doi.org/10.29240/jba.v4i2.144>
- Ningsih, P. E. & Sari, M. N. (2021). Are learning media effective in English online learning?: The students' and teachers' perceptions. *Tarbawi: Jurnal Ilmu Pendidikan*, 17 (2). 173-183.
- Nurmala, I., Haris, M. & Saripudin, R. (2023). Integrating technology in language education: A study on TELL practices in higher education. *Journal of Language Learning Technology*, 18(4), 221-234.
- Pasquale, F. (2020). *New Laws of Robotics: Defending Human Expertise in The Age of AI*. Harvard University Press.
- Peruski, L. & Mishra, P. (2004). Webs of activity in online course design and teaching. *ALT-J, Research in Learning Technology*, 12(1), 37-49.
- Priego, C. M., Munoz, G. N. & Ciesielkiewicz, M. (2015). Blogs as a tool for the development of self-regulated learning skills: a project. *American Journal of Educational Research*, 3(1), 38-42. <http://dx.doi.org/10.12691/education-3-1-8>
- Rusmiyanto, R., Huriati, N., Fitriani, N., Tyas, N. K., Rofi'i, A. & Sari, M. N. (2023). The role of artificial intelligence (AI) in developing English language learners' communication skills. *Journal on Education*, 6(1), 750-757. <https://doi.org/10.31004/joe.v6i1.2990>
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14.

- Sims, R. (2023). *Not Quite Eye to AI: Student and Teacher Perspectives on The Use of Generative AI in Higher Education*. Education and Information Technologies.
- Solovey, O. Z. (2024). Comparing peer, ChatGPT, and teacher corrective feedback in EFL Writing: Student perceptions and preferences. *Technology in Language Teaching & Learning*, 6(3), 1-23. <https://doi.org/10.29140/tltl.v6n3.1482>
- Steiss, J., Tate, T., Graham, S., Cruz, J., Hebert, M., Wang, J., Moon, Y., Tseng, W., Warschauer, M. & Olson, C. B. (2024). Comparing the quality of human and ChatGPT feedback of students' writing. *Learning and Instruction*, 91, 101894. <https://doi.org/10.1016/j.learninstruc.2024.101894>
- Su, Y., Lin, Y. & Lai, C. (2023). Collaborating with ChatGPT in argumentative writing classrooms. *Assessing Writing*, 57, 100752. <https://doi.org/10.1016/j.asw.2023.100752>
- Ulla, M., Perales, W. F. & Busbus, S. O. (2023). 'To generate or stop generating response': Exploring EFL teachers' perspectives on ChatGPT in English language teaching in Thailand. *Learning: Research and Practice*, 9 (2), 168-182. <https://www.tandfonline.com/doi/full/10.1080/23735082.2023.2257252>
- Wallace, R. M. (2004). A framework for understanding teaching with the Internet. *American Educational Research Journal*, 41(2), 447-488.
- Zimmerman, B. J. (1990). Self-regulated learning and academic achievement: An overview. *Journal Educational Psychologist*, 25(1), 3-17.

APPENDICES

Appendix 1: Specific procedures in using ChatGPT to design learning materials for students' IELTS Speaking lessons

Phase 1: Using ChatGPT for lesson planning (sample)

- Set specific lesson objectives/ Choose a specific topic for the speaking lesson
- Give ChatGPT the specific educational context (level of students) and objectives of the lesson
- Ask ChatGPT to suggest a lesson plan
- Ask ChatGPT to give some strategies to answer each IELTS speaking part
- Ask ChatGPT to design some sample questions & suggested answers for each part of the test, provide a brief outline for each sample answer, and make a list of key vocabulary in each suggested answer.
- Ask ChatGPT to design a vocabulary quiz for the vocabulary list
- Design a students' handout & ppt slide based on suggested materials written by ChatGPT

Phase 2: In-class activities

- Pre-teach vocabulary in the lesson
- Mini lecture about speaking tips & strategies
- Speaking practice:
 - Elicit students' ideas for each question
 - Show & analyse sample answers and teach vocabulary in context
 - Let students practice in pairs and then individually
- Vocabulary revision quiz/ game

Phase 3: Students' home practice

- In cycle 1: ask students to record a video answering some speaking questions in the lesson

In cycle 2: ask students to interact with Chat-GPT using spoken language: ask Chat-GPT to act as a teacher asking some IELTS speaking questions related to the lesson objectives and give detailed comments and suggestions for students' improvement → record the conversation.

Appendix 2: Sample prompts for ChatGPT

1. Hello. I am an IELTS teacher. I am preparing a speaking lesson to teach IELTS speaking part 3 for students at B1 - B2 level who have learnt IELTS for several months. Please help me write a lesson plan to teach IELTS speaking part 3 in a one-hour lesson.

2. Can you design PowerPoint slides or a handout containing useful strategies to answer IELTS speaking part 3?

3. Can you design a gap-filling exercise for that handout so that the students can listen to the lecture and take notes at the same time? Only make a gap in the parts that are easy for students to predict.

4. Can you design some sample questions & suggested answers for each main type of IELTS speaking part 3. Please remember that the students are at B1 - B2 level and have studied IELTS for several months. Please include 1 or 2 idioms in your sample answers. Provide a brief outline for each sample answer. And make a list of key vocabulary (from B2 to C1 level) in each suggested answer. Please include Number, English items, Part of speech, Pronunciation, Vietnamese meaning, and Examples in the vocabulary list.

5. Can you make a table containing 15 key vocabulary items (from B2 to C2 level) in the suggested answer above. Please include Number, English items, Part of speech, Pronunciation, Vietnamese meaning, and Examples in the table. Suggest 2 idioms to answer the above-mentioned sample answers.

6. Please design a vocabulary quiz (containing 4 multiple-choice questions and 4 gap-filling questions) for the vocabulary list.

Appendix 3: Sample conversations with ChatGPT

CYCLE 1

Sample 1: <https://chat.openai.com/share/8fdca1d0-28da-478e-9367-220e7f008a66>

Sample 2: <https://chat.openai.com/share/02607775-062e-4c10-9b22-c721aef262c9>

CYCLE 2 (complete lesson handout)

Sample 1: <https://chatgpt.com/share/35a95d5d-d6cb-462b-96e8-ce8a0c002080>

Appendix 4: Survey questionnaire

STUDENTS' RESPONSES TOWARDS THE USE OF CHATGPT IN DEVELOPING TEACHING AND LEARNING MATERIALS FOR IELTS SPEAKING SKILL

1. How do you evaluate the effectiveness of ChatGPT-based materials in helping you improve the your speaking skill?

Very bad

Bad/ Poor

Average

Good

Excellent

★

★

★

★

★

2. Do you prefer ChatGPT-based materials and conventional IELTS Speaking materials (textbooks)?

☐ ChatGPT-based materials

☐ conventional IELTS Speaking materials

☐ Other (please specify)

3. How do you compare ChatGPT-based materials and conventional IELTS Speaking materials in terms of **how effective** they are in improving your speaking

ChatGPT-based materials are **MUCH WORSE** than traditional IELTS Speaking materials

ChatGPT-based materials are **A LITTLE BIT WORSE** than traditional IELTS-speaking materials

ChatGPT-based materials are **as good as** traditional IELTS Speaking materials

ChatGPT-based materials are **A LITTLE BIT BETTER** than traditional IELTS Speaking materials

ChatGPT-based materials are **MUCH BETTER** than traditional IELTS Speaking materials

★

★

★

★

★

4. How do you compare ChatGPT-based materials and conventional IELTS Speaking materials in terms of **how user-friendly they are** in improving your speaking

ChatGPT-based materials are MUCH WORSE than traditional IELTS Speaking materials	ChatGPT-based materials are A LITTLE BIT WORSE than traditional IELTS-speaking materials	ChatGPT-based materials are as good as traditional IELTS Speaking materials	ChatGPT-based materials are A LITTLE BIT BETTER than traditional IELTS Speaking materials	ChatGPT-based materials are MUCH BETTER than traditional IELTS Speaking materials
★	★	★	★	★

5. In your opinion, what are the most outstanding advantages of using ChatGPT in developing teaching and learning materials for IELTS Speaking skill for students(if any)?

6. In your opinion, what are some potential disadvantages of using ChatGPT in developing teaching and learning materials for IELTS Speaking skill(if any)?

7. Do you have any suggestions to boost the efficiency of ChatGPT-based materials for your IELTS speaking skill?

8. How do you evaluate the effectiveness of ChatGPT audio interaction in helping you improve the your speaking skill when you practice speaking with ChatGPT at home?

Very bad	Bad	Average	Good	Very good
★	★	★	★	★

9. Do you use Chat-GPT to practice speaking at home frequently? How do you evaluate the effectiveness of ChatGPT audio interaction in helping you improve the your speaking skill?

Appendix 5: List of questions for semi-structured interviews with students

1. Do you find any differences between the speaking handouts in the previous lesson with learning materials in your speaking textbook?
2. How do you evaluate the effectiveness of ChatGPT-generated materials in helping you improve your speaking skill?
3. In what ways do ChatGPT-generated materials differ from conventional IELTS Speaking materials?
4. How do you compare ChatGPT-based materials and conventional IELTS Speaking materials in terms of the following criteria:
 - How effective it is in improving your speaking
 - How user-friendly it is
5. Do you use Chat-GPT to practice speaking at home frequently? How do you evaluate the effectiveness of ChatGPT audio interaction in helping you improve your speaking skill?
6. Do you have any suggestions to boost the efficiency of ChatGPT-based materials for your IELTS speaking skill?

Appendix 6: Extract from teachers’ reflective journal

Week	What is happening?	What are my perceptions/ attitudes about the happening?	What are my responses/ interpretations of what has happened?
1	+ Getting to know each other +Introduction about the syllabus +Introduction to the use of ChatGPT as a supporting tool for learning	Students were excited and worried at the same time as they did not know how to use the new AI tool effectively	+We motivated the students. +We would scaffold students more effectively so that they understand what to do.
...

4	Students were provided with ChatGPT-based materials for in-class learning and practice only.	We realized the lack of appropriate homework exercise to enhance the quality and time of students' speaking practice at home.	At the end of Cycle 1, we revised our plan for Cycle 2 in which we instructed the students to use voice interaction with Chat-GPT at home for further practice. Specifically, the students would be instructed to ask Chat-GPT to act as a teacher asking some IELTS speaking questions related to the lesson objectives and give detailed comments and suggestions for students' improvement, then the students would record the conversation and submit it to the teachers.
...