

AI-Integrated IELTS Learning Experiences among Guangzhou Private University IELTS Students: A Phenomenological Study in Digital Classrooms

Liang Shang

Guangzhou College of Applied Science and Technology, Zhaoqing, Guangdong, 526072, China

ABSTRACT

The AI(Artificial Intelligence) era has firmly embedded digital technologies into the fabric of higher education, with AI spearheading a transformation in language learning. This phenomenological study explores the lived experiences of International English Language Testing System (IELTS) students at private universities in Guangzhou, China, as they utilize AI-integrated tools in digital and hybrid classrooms. Through semi-structured, in-depth interviews with ten participants, this research sought to understand the essence of their learning journey, focusing on perceptions, benefits, challenges, and the overall nature of human-AI interaction in a high-stakes testing context. Thematic analysis of the data revealed four superordinate themes: (1) The AI as a 24/7 Personalized and Non-Judgmental Tutor, highlighting accessibility and instant feedback; (2) Navigating the Algorithm's Logic and Its Limitations, which encapsulates the struggle with the perceived rigidity and lack of nuanced understanding of AI tools; (3) A Double-Edged Sword of Learner Autonomy, describing the simultaneous empowerment and disorientation students felt; and (4) The Enduring Need for Human Connection in a Digital Space, underscoring the irreplaceable role of teachers and peers for affective and strategic support. The findings suggest that while students value AI for its efficiency and practice opportunities, their experience is a complex interplay of empowerment and frustration. The study concludes with implications for educators, AI developers, and institutional policymakers, advocating for a blended pedagogical approach that leverages AI's strengths while preserving the essential human element in language education.

KEYWORDS

Artificial Intelligence (AI); IELTS, English language learning; Phenomenology; Digital classroom; Student experience

1 Introduction

1.1 Background of the study

Continuous technological advancements have served as a powerful catalyst, accelerating the integration of digital technologies into every facet of education (Hodges et al., 2020). In China, where the demand for international education remains high, proficiency in English as measured by tests like the International English Language Testing System (IELTS) is a critical gateway for students seeking to study abroad. The shift to online and hybrid learning models, initially a necessity, has persisted, creating a new normal for educational delivery in the current education. Within this new digital ecosystem, Artificial Intelligence (AI) has emerged as a transformative force, offering personalized, data-driven, and scalable solutions for language learners.

AI-powered platforms for IELTS preparation now offer a suite of tools, from automated writing evaluation and grammar checkers (e.g., Grammarly, Pigai) to chatbot-based speaking practice and adaptive reading exercises. For students in Guangzhou, a major hub for international exchange, private universities have been particularly agile in adopting these technologies to maintain a competitive edge. However, while the technical capabilities and potential efficacy of these tools are frequently discussed, a deep, human-centered understanding of how students experience this AI-integrated learning process remains underexplored.

1.2 Problem statement

The rapid adoption of AI in IELTS preparation has outpaced research into the subjective, lived experiences of the students who use these tools daily. Much of the existing literature focuses on quantitative measures of effectiveness or system design (Warschauer & Liaw, 2011; Chapelle, 2009). There is a significant gap in qualitative research that delves into the nuances of the student experience—their perceptions, emotions, frustrations, and coping strategies—within the specific context of high-stakes test preparation in a digitally-saturated environment. This study addresses this gap by focusing on IELTS students at private universities in Guangzhou, a demographic that is both digitally adept and under immense pressure to perform.

1.3 Research questions

This study is guided by the central research question: What is the essence of the lived experience of Guangzhou private

university students preparing for the IELTS exam using AI-integrated tools in digital classrooms? To answer this central question, the following sub-questions were explored:

- (1) How do students perceive the role of AI tools in their IELTS learning journey?
- (2) What are the perceived benefits and affordances of using AI-integrated platforms for IELTS preparation?
- (3) What are the perceived challenges and limitations encountered when using these AI tools?
- (4) How does the integration of AI shape their interaction with human instructors and peers in a digital or hybrid learning environment?

1.4 Significance of the study

This study provides valuable insights for several key stakeholders:

Educators and Language Instructors: By understanding students' lived experiences, teachers can better design blended learning curricula that strategically integrate AI tools while providing the essential human support that AI cannot.

AI Developers and EdTech Companies: The findings offer user-centric feedback that can inform the design of more intuitive, effective, and human-like AI learning applications, particularly in improving feedback mechanisms and affective support.

University Administrators and Policymakers: This research can guide institutional decisions regarding technology investment, teacher training, and the development of pedagogical frameworks for the effective and ethical use of AI in education.

Students: By articulating the shared experiences of their peers, this study can help current and future students develop more effective strategies for leveraging AI tools in their own learning.

1.5 Scope and delimitation

This study is delimited to undergraduate students currently enrolled in or having recently completed IELTS preparation courses at selected private universities in Guangzhou, China. Participants were required to have used at least two distinct AI-powered tools (e.g., an automated writing scorer, a speaking practice app) for a minimum of three months. The study adopts a phenomenological approach and does not aim to measure learning outcomes or compare the efficacy of different AI tools. Its focus is strictly on the subjective, lived experience of the learners.

2 Literature review

2.1 The evolution of technology in language learning

The use of technology in language education has a rich history, evolving from Computer-Assisted Language Learning (CALL) in the 1960s to the more recent Mobile-Assisted Language Learning (MALL) (Warschauer & Healey, 1998). Early CALL programs were often drill-based, while contemporary systems leverage multimedia, the internet, and social networking to create immersive learning environments. The current phase is characterized by the integration of AI, which promises a paradigm shift from technology as a static tool to technology as an interactive, adaptive partner in learning (Beatty, 2010). AI's ability to process natural language, analyze vast datasets, and provide personalized feedback represents a significant leap forward from previous technological iterations (Chen et al., 2020).

2.2 AI applications in English language learning and IELTS preparation

AI has been applied to all four language skills targeted by the IELTS exam.

Writing: Automated Writing Evaluation (AWE) systems like Grammarly, Turnitin, and specialized IELTS tools provide instant feedback on grammar, syntax, vocabulary, and structure. Research has shown that AWE can improve grammatical accuracy and writing fluency, though concerns remain about the depth and conceptual quality of the feedback (Ranalli, 2018; Xi, 2010).

Speaking: AI-powered chatbots and speech recognition tools offer students a platform to practice speaking without the "foreign language anxiety" often experienced when speaking to a human (Bibauw, François, & Desmet, 2019). These tools can provide feedback on pronunciation, fluency, and intonation.

Reading and Listening: AI algorithms can create personalized learning paths, adapting the difficulty of texts and questions based on a student's performance. This adaptive learning model helps target individual weaknesses more efficiently than a one-size-fits-all approach (Golonka et al., 2014).

2.3 The current digital classroom

The global emergency remote teaching (ERT) has permanently altered expectations and competencies in digital education (Hodges et al., 2020). While ERT was a crisis response, it has evolved into more intentionally designed online and hybrid learning models. This "new normal" is characterized by increased student familiarity with digital tools but also by challenges such as digital fatigue, the digital divide, and a re-evaluation of the role of the physical campus and face-to-face interaction.

2.4 The phenomenological approach to understanding experience

Phenomenology, as a research methodology rooted in the philosophy of Edmund Husserl, seeks to understand and describe the essence of a lived experience from the perspective of the individuals who have lived it (Moustakas, 1994). It is particularly well-suited for this study because it moves beyond simple measures of satisfaction or performance to explore the complex, multi-faceted, and subjective nature of learning with a new and powerful technology like AI. By bracketing preconceived notions, the researcher can focus on the participants' own meanings, feelings, and perceptions, providing a rich, textured account of the phenomenon (Creswell & Poth, 2018).

2.5 Synthesis and research Gap

The literature confirms the growing technical sophistication of AI in language learning and recognizes the transformative impact of the digital shift. However, a significant gap remains in understanding the human dimension of this technological integration. While we know what the tools can do, we know far less about what it is like for a student in a high-pressure situation like IELTS preparation to rely on them. This phenomenological study directly addresses this gap by exploring the lived experiences of Guangzhou private university students, providing a crucial, context-specific perspective.

3 Methodology

3.1 Research design

This study employed a qualitative research design, specifically a descriptive phenomenological approach, as articulated by Moustakas (1994). This design was chosen to capture the essence and underlying structure of the shared experience of using AI-integrated tools for IELTS preparation. The focus is on describing "what" the participants experienced and "how" they experienced it.

3.2 Research setting and participants

The research was conducted with students from two private universities in Guangzhou, China. These universities are known for their strong international programs and significant cohorts of students preparing for the IELTS exam. A purposive sampling strategy was used to select ten participants who met the following criteria:

Currently enrolled as an undergraduate student at a private university in Guangzhou. They are actively preparing for the IELTS exam. They had used AI-integrated learning tools (e.g., AI-powered writing/speaking apps) for at least three months. The sample consisted of six female and four male students, aged 19-22, from various academic disciplines. Pseudonyms are used to protect participant anonymity.

3.3 Data collection

The primary method of data collection was semi-structured, in-depth interviews conducted via video conferencing (Zoom). Each interview lasted approximately 60-90 minutes. An interview protocol was used to guide the conversation, starting with a broad, open-ended prompt: "Could you please describe a typical experience of using an AI tool to study for your IELTS exam?" Follow-up questions and probes were used to explore emerging themes, such as specific moments of frustration or success, feelings about AI feedback, and comparisons with human teachers. All interviews were conducted in Mandarin Chinese (the participants' native language) to allow for richer expression, and were then transcribed and translated into English by the researcher.

3.4 Data analysis

The data were analyzed using a thematic analysis process adapted from Moustakas' (1994) phenomenological method

and informed by Braun and Clarke (2006). The steps included Bracketing: The researcher engaged in self-reflection to identify and set aside personal biases and preconceived notions about AI in education. Horizontalization: Each transcript was read multiple times to identify significant statements and phrases related to the experience. All statements were treated as having equal initial value. Clustering and Thematizing: The significant statements were then clustered into meaningful units or themes that captured the essence of the participants' experiences. Textural and Structural Description: A rich, "textural" description of what the participants experienced was written, using verbatim quotes. This was followed by a "structural" description of how they experienced it, focusing on the underlying contexts and conditions. Synthesis of Essence: Finally, the textural and structural descriptions were integrated to form a composite description of the essential, invariant structure of the experience—the essence of learning IELTS with AI for this group of students.

4 Findings

The analysis of the interview data revealed four superordinate themes that collectively constitute the essence of the participants' lived experience.

Theme 1: The AI as a '24/7 Personalized and Non-Judgmental Tutor'

All participants expressed a profound appreciation for the accessibility and immediacy of AI tools. They described the AI as a relentless, ever-present study partner that was available anytime, anywhere. This was particularly valued for skills that require extensive practice, like writing and speaking. This theme highlights the AI role in providing a safe, low-stakes environment for repetitive practice, a crucial component of language acquisition.

Theme 2: Navigating the 'Algorithm's Logic and Its Limitations'

While students praised AI for its efficiency, they also articulated a deep-seated frustration with its perceived rigidity and lack of human nuance. They often found themselves trying to "game the system" rather than genuinely improve their communicative competence. This theme reveals a critical tension: students recognize the AI's limitations but are compelled to conform to its logic because it is tied to their score, leading to a mechanistic and sometimes counter-intuitive learning process.

Theme 3: A Double-Edged Sword of Learner Autonomy

The integration of AI tools fostered a strong sense of autonomy and self-directed learning. Students felt empowered to take control of their study schedules, identify their own weaknesses, and work at their own pace. However, this autonomy was a double-edged sword. The sheer volume of data and feedback, without a human guide to help interpret and prioritize it, often led to feelings of being overwhelmed and disoriented. This theme illustrates that while AI can provide the tools for autonomy, it often fails to provide the pedagogical scaffolding necessary for learners to use that autonomy effectively.

Theme 4: The Enduring Need for Human Connection in a Digital Space

Despite the utility of AI, every single participant emphasized the irreplaceable role of their human teachers and peers. The AI could provide corrections, but it could not provide encouragement, strategic advice, or a sense of community. This final theme powerfully underscores that for these students, learning is not merely a cognitive or technical process but a deeply social and emotional one. The AI could supplement but never supplant the need for human empathy, mentorship, and camaraderie.

5 Discussion

The findings of this phenomenological study reveal that the lived experience of using AI for IELTS preparation is a complex, ambivalent, and multi-dimensional phenomenon. This experience can be understood as a constant negotiation between the efficiency of the machine and the need for human understanding. The discussion connects these findings to the existing literature and explores the deeper essence of this experience.

The first theme, The AI as a '24/7 Personalized and Non-Judgmental Tutor', strongly aligns with the established benefits of CALL and AI-driven learning, such as providing immediate, individualized feedback and creating low-anxiety practice environments (Warschauer & Healey, 1998; Bibauw et al., 2019). The students' appreciation for the AI's tireless and non-judgmental nature confirms its utility as a powerful tool for building fluency and accuracy through repetitive practice.

However, the second theme, Navigating the 'Algorithm's Logic and Its Limitations,' provides a critical counterpoint. Students' experiences of "gaming the system" and receiving feedback that lacks contextual understanding echo the concerns raised by scholars about the limitations of current AWE systems (Ranalli, 2018; Xi, 2010). This suggests that while AI can be effective at surface-level error correction, it struggles with the deeper, communicative, and pragmatic aspects of language. The essence of this experience is a form of "algorithmic anxiety," where the learner's focus shifts from authentic

communication to pleasing the machine.

The third theme, 'A Double-Edged Sword of Learner Autonomy,' speaks directly to the discourse on self-directed learning in digital environments. While AI tools provide the data and resources for students to become more autonomous, as celebrated by proponents of personalized learning (Chen et al., 2020), this study reveals the potential for cognitive overload and a lack of pedagogical guidance. The experience is not one of simple empowerment, but of a difficult search for structure and meaning within a sea of data. This highlights the need for what is often termed "scaffolded autonomy," where technology empowers students within a framework designed and supported by a human educator.

Finally, the fourth theme, 'The Enduring Need for Human Connection,' is perhaps the most significant. It powerfully reinforces that language learning is an inherently social and affective endeavor. The students' craving for empathy, strategic advice, and peer community resonates with sociocultural theories of learning (Vygotsky, 1978) and highlights the limitations of a purely technology-driven approach.

In synthesizing these themes, the essence of the AI-integrated IELTS learning experience for these students is one of instrumental alliance and affective distance. They form a pragmatic alliance with the AI as an efficient tool to achieve a specific goal (a high IELTS score). They value its speed, data, and availability. However, they maintain a significant emotional and pedagogical distance from it, recognizing it as a non-sentient, rule-based system that cannot fulfill their deeper needs for nuanced understanding, strategic guidance, and human connection.

6 Conclusion

6.1 Summary of findings

This phenomenological study explored the lived experiences of Guangzhou private university students using AI-integrated tools for IELTS preparation in digital classrooms. The research identified four key themes: the perception of AI as a tireless and non-judgmental tutor; the struggle with the algorithm's rigid logic; the double-edged nature of AI-driven autonomy; and the persistent, unfulfilled need for human connection. The essence of their experience is an instrumental partnership with AI, marked by an awareness of its utility for practice but also a clear recognition of its affective and pedagogical limitations.

6.2 Implications

For Educators: The role of the teacher is not diminished by AI but is transformed. Educators should adopt a blended model, training students to use AI tools critically as a supplement for practice, while focusing their own efforts on providing higher-order thinking skills, strategic test-taking advice, and crucial motivational and emotional support.

For AI Developers: There is a clear need to move beyond mere accuracy-based feedback. Future AI tools should aim for more transparent and pedagogically-sound feedback, potentially incorporating features that explain the "why" behind corrections and offer strategic advice in a more conversational, less rigid manner.

For Institutions: Universities should invest not only in AI technology but also in professional development for teachers to become effective facilitators of blended learning. They must also continue to foster learning communities and spaces for peer-to-peer interaction, recognizing that technology cannot replace the social fabric of education.

6.3 Limitations of the study

This study has several limitations. As a qualitative study with a small, purposive sample from a specific geographic and institutional context, the findings are not intended to be statistically generalizable. The data are self-reported and rely on the participants' memories and interpretations of their experiences. Future research could explore these phenomena on a larger scale.

6.4 Recommendations for future research

Future research could build upon this study in several ways: A quantitative or mixed-methods study could investigate the correlation between the use of specific AI tools and actual IELTS score improvements. A comparative study could explore differences in experiences between students at private and public universities, or across different cultural contexts. A longitudinal study could track students over their entire IELTS preparation journey to understand how their perceptions of AI evolve over time. Research could focus on the teacher's perspective, exploring their experiences and challenges in integrating AI into their pedagogy.

In conclusion, AI is undoubtedly a powerful and permanent feature of the language learning landscape. However, this study serves as a crucial reminder that technology is a tool, not a panacea. For education to be truly effective, especially in

the high-stakes, human-centric domain of language learning, it must be a thoughtful synthesis of the best of what both technology and humanity have to offer.

About the Author

Liang Shang, male, Master, Lecturer, Research Direction: Second Language Acquisition.

References

- [1] Beatty, K. (2010). Teaching and researching computer-assisted language learning (2nd ed.). Pearson Education.
- [2] Bibauw S., François T., & Desmet P. (2019). The potential of conversational agents for second language learning. In CALL and complexity—short papers from EUROCALL 2019 (pp. 39-45). Research-publishing.net.
- [3] Braun V., & Clarke V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- [4] Chapelle C. A. (2009). The relationship between second language acquisition theory and computer-assisted language learning. *The Modern Language Journal*, 93, 741-753.
- [5] Chen, X., Xie H., Zou D., & Hwang G. J. (2020). Application and theory gaps during the rise of artificial intelligence in education. *Computers and Education: Artificial Intelligence*.
- [6] Creswell, J. W., & Poth C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage publications.
- [7] Golonka E. M., Bowles A. R., Frank V. M., Richardson D. L., & Freynik S. (2014). Technologies for foreign language learning: A review of technology types and their effectiveness. *Computer Assisted Language Learning*, 27(1), 70-105.
- [8] Hodges C., Moore S., Lockee B., Trust T., & Bond A. (2020). The difference between emergency remote teaching and online learning. *Educause Review*, 27.
- [9] Lincoln, Y. S., & Guba E. G. (1985). *Naturalistic inquiry*. Sage.
- [10] Moustakas, C. (1994). *Phenomenological research methods*. Sage publications.
- [11] Ranalli J. (2018). The state of automated writing evaluation in 2018: A review of its uses and its pedagogical potential. *Computer Assisted Language Learning*, 31(8), 819-837.
- [12] Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- [13] Warschauer M., & Healey D. (1998). Computers and language learning: An overview. *Language Teaching*, 31(2), 57-71.
- [14] Warschauer M., & Liaw M. L. (2011). Emerging technologies for autonomous language learning. *Studies in Self-Access Learning Journal*, 2(3), 107-118.
- [15] Xi X. (2010). Automated scoring and feedback in an e-portfolio for English language learners. *Language Testing*, 27(1), 69-92.