

Voices in feedback: A dual-theoretical exploration of learners' perception of teachers versus AI-powered tools

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Feedback plays a central role in pronunciation learning by helping learners notice and adjust their phonological output. With the growing use of artificial intelligence (AI) and automatic speech recognition technologies, learners increasingly receive feedback from both human and automated sources. This qualitative study explores how five Vietnamese English-major undergraduates perceived pronunciation feedback from AI-powered tools and teachers during a seven-week learning cycle, and how they integrated these feedback sources in their practice. Drawing on Interactionist Second Language Acquisition theory and the Feedback Literacy framework, data were collected from learning diaries, written reflections, and semi-structured interviews. The findings show that learners valued AI-powered tools for their immediacy, accessibility, detailed pronunciation feedback, and low-pressure practice environment. However, they also questioned AI feedback when corrections appeared excessive or unclear. In contrast, teacher feedback was perceived as more reliable, explanatory, and personally relevant, although public correction sometimes caused anxiety. Learners tended to use these tools for initial rehearsal and repeated practice, while relying on teachers for clarification, validation, and deeper understanding. The study suggests that learners strategically combined AI and teacher feedback to balance efficiency, interpretation, and emotional support in pronunciation learning.

Keywords: AI-generated feedback, feedback literacy, pronunciation learning, teacher feedback, Vietnamese EFL learners

Introduction

Feedback is essential in second language (L2) pronunciation acquisition, as it helps students identify phonological errors, improve their output, and move toward more target-like pronunciation (Qutub, 2023). Traditionally, teachers have been the primary providers of feedback, offering immediate, context-rich, and emotionally supportive responses that boost learners' awareness and confidence (Du & Daniel, 2024). However, recent advances in artificial intelligence (AI) and automatic speech recognition (ASR) have introduced new feedback environments that provide immediate, personalized, and

repeatable corrections outside the classroom (Javier et al., 2026; McCrocklin & Levis, 2025). Utilizing deep learning algorithms and speech recognition, AI tools deliver instant phoneme-level assessments, waveform displays, and articulation instructions. These features promote self-assessment and repeated practice, enhancing learners' accuracy, intelligibility, and confidence (Leis, 2025; Liu et al., 2025; Sun et al., 2023). Tools such as ELSA Speak, SpeechAce, and Microsoft Reading Progress are valued for their objectivity, ease of use, and ability to reduce speaking anxiety (Pham & Nguyen, 2023).

Despite these benefits, students' perceptions of AI feedback are complex. Many appreciate its immediacy and objectivity but remain skeptical about its interpretive capabilities. For example, Isotalus et al. (2025) found that students value the quick, unbiased nature of AI but question whether it can accurately interpret context. Roe et al. (2024) observed initial enthusiasm that declined when students struggled to understand automated corrections without teacher support. Zhang et al. (2025) reported that students tend to trust AI more when its feedback is validated or supplemented by a teacher, underscoring the ongoing importance of human input. Similarly, Susanto (2025) highlighted that while students value AI's efficiency and objectivity, they still rely on teachers for interpretation, emotional support, and reassurance.

In Vietnam, research shows cautious optimism. Phung et al. (2022) reported effective pronunciation practice supported by deep learning models. Hoang et al. (2023) observed improvements in pronunciation accuracy with chatbot AI platforms. Pham and Nguyen (2023) documented high learner satisfaction with tools like Microsoft Reading Progress and ChatGPT, citing their ease of use and engagement. Nguyen et al. (2025) confirmed SpeechAce's effectiveness in improving accuracy but noted that technological feedback alone cannot sustain motivation or address emotional factors. Conversely, Le (2024) and Duong and Nguyen (2024) expressed concerns that overreliance on AI might hinder critical thinking and independent learning.

There appears to be a shift toward viewing AI and teacher feedback as complementary rather than competing. Students now see AI as useful for intensive, self-paced practice, while teachers provide validation, nuanced feedback, and emotional resonance (Zhang et al., 2025). Despite these developments, research on how students integrate, differentiate, and internalize these feedback sources remains limited. Most studies examine either teacher or AI feedback in isolation, without exploring how learners synthesize both during pronunciation practice. Broader research (e.g., Susanto, 2025) has investigated trust in human versus AI feedback but often lacks focus on pronunciation correction, emotional engagement, and actionable strategies. In Vietnam, studies (e.g., Nguyen et al., 2025; Vo & Nguyen, 2024) mainly explore perceived usefulness or short-term satisfaction, neglecting how students build trust, stay engaged, or adapt their learning behaviors over time. Few studies incorporate reflections, diaries, or interviews to capture learners' lived experiences of feedback integration.

To address these gaps, this study aims to explore how Vietnamese EFL students respond to pronunciation feedback from both teachers and AI. The key questions are:

- How do students perceive AI-generated pronunciation feedback compared to teacher feedback?
- How do students strategically utilize both sources to support their pronunciation development?

Theoretical framework

This study combines two theoretical frameworks, namely the Feedback Literacy framework and the Interactionist Second Language Acquisition (SLA) perspective. Regarding the Feedback Literacy framework, scholars including Carless and Boud (2018) and Winstone and Carless (2019) focus on students' abilities to interpret feedback, respond emotionally, and use feedback as a tool for action. This perspective emphasizes the importance of learner agency and emotional engagement, especially considering that students often receive feedback from multiple sources. The framework underscores how students strategize and navigate these diverse feedback channels, whether human or AI-driven.

From the Interactionist SLA perspective, language acquisition is viewed as a cyclical process involving input, feedback, and output modification, which helps learners notice and reformulate target structures (Gass & Mackey, 2014; Long, 1996; Mackey, 2012). In pronunciation, corrective feedback such as recasts or elicitations directs learners' attention to specific articulatory errors, facilitating phonological development (Lyster & Saito, 2010). In online contexts, AI systems support these interactionist dynamics by providing individualized, repetitive practice opportunities that allow learners to test hypotheses and refine their pronunciation (Hubbard, 2021). Although AI interactions lack the subtlety of human exchanges, they serve as "simulated interaction," offering learners additional practice outside formal classroom settings.

By integrating these frameworks, the current study moves beyond examining students' performance or satisfaction with the feedback system. It investigates their perceptions, emotional responses, and strategic approaches to using feedback from multiple sources. Both cognitive and emotional engagement are crucial for understanding how learners navigate mixed feedback environments, addressing existing gaps in the literature related to perceptions of AI-generated feedback. Ultimately, this approach aims to deepen insights into students' trust, strategies, and behaviors, enhancing their engagement with AI-mediated pronunciation activities.

Methodology

Research design

This research adopted a qualitative research design to explore students' nuanced experiences and attitudes towards feedback provided by the teacher and AI (Creswell & Poth, 2018).

Participants

Through purposive sampling, five undergraduate English majors aged 19–21 at a public university in a major city in Vietnam were recruited from a Listening and Speaking course with B2 as the expected learning outcome. The participants included three males and two females. They were selected because they were at the B1+ to below-B2 level, as determined by their completion of prerequisite English skills courses and their enrollment in the B2-oriented Listening and Speaking course. They had also received teacher pronunciation feedback in prior regular classes and participated in AI-supported pronunciation practice during the study. This relatively narrow proficiency range was considered appropriate because learners at this level were expected to have sufficient phonological awareness and self-monitoring ability to notice, interpret, and respond to pronunciation feedback. In addition, all participants completed the same speaking tasks

required by the course syllabus, which helped reduce substantial differences in how they interpreted the feedback.

Prior to university, most participants had mainly experienced form-focused English instruction and had limited opportunities for communicative pronunciation practice. During the seven-week study, all five students used two free AI pronunciation feedback tools, SpeechAce and IELTSAce, several times a week to support pronunciation practice related to the course outcome. These tools provided comparable core feedback features, including pronunciation scoring, phoneme-level feedback, and opportunities for repeated practice. The phoneme-level feedback features were selected because they offered explicit and immediate corrective feedback that could support learners' noticing, self-monitoring, and interpretive engagement with pronunciation feedback.

Figures 1 and 2 present screenshots of the AI interfaces used in this study, illustrating the types of feedback provided by the systems, including pronunciation scores, highlighted pronunciation errors, and opportunities for repeated practice.

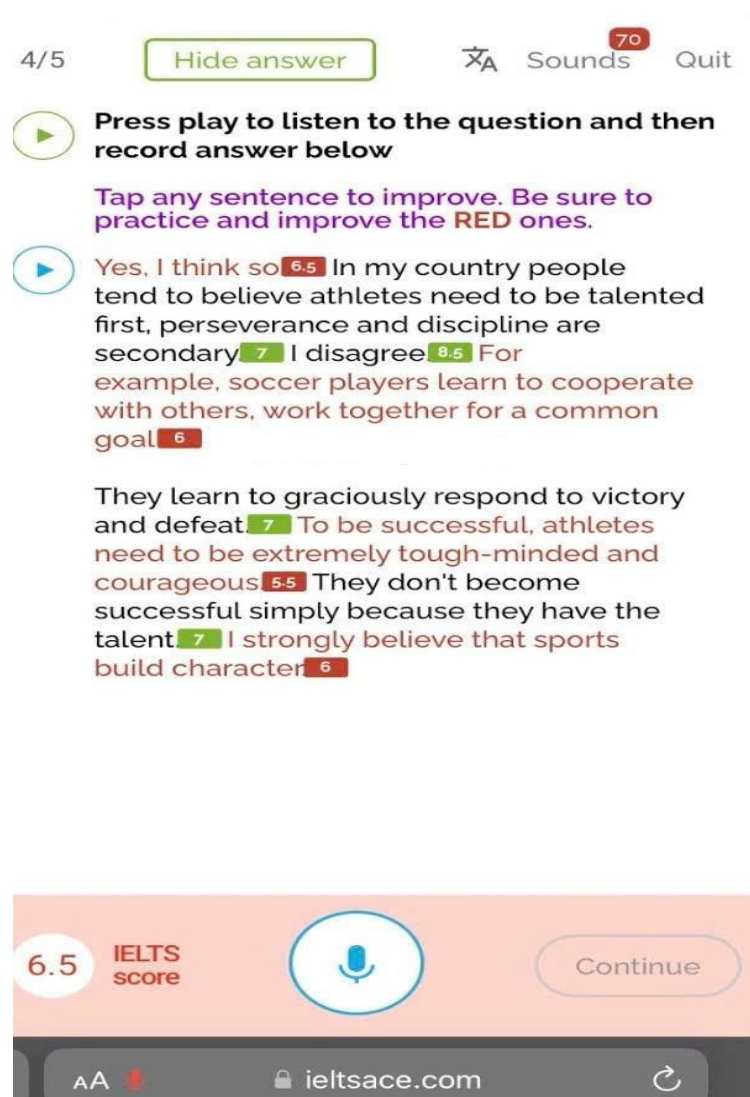


Figure 1. One participant's practice with IELTSAce

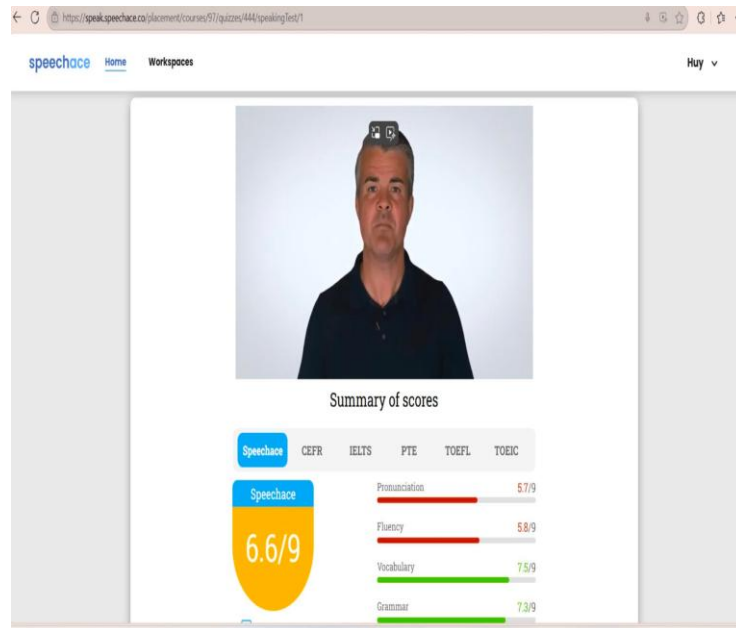


Figure 2. One participant's practice with SpeechAce

Data collection

There were three sources of data in this study: journal diaries, written reflections, and semi-structured interviews. First, journal diaries, or in-practice logs, were short entries created during the seven-week study. The diary prompts referred to: (a) the date and which AI tool participants had used, (b) their uses and general comments, and (c) their perceived benefits and challenges of using the AI tool to practice pronunciation. Participants wrote diary entries one to two times a week, with a target of 7–14 entries per person, contemporaneously with their practice. The diary entries were collected digitally (see Appendix A for a sample).

Second, written reflections, or after-cycle sense-making, consisted of a single reflective narrative completed at the end of week 7. These reflections prompted participants to synthesize experiences across the AI and teacher feedback components, name and articulate their own criteria for what “good feedback” looks like, and describe the ways in which they integrated both sources of feedback. The written reflections were also collected digitally (see Appendix B for a sample).

Third, semi-structured interviews lasting 30–45 minutes were conducted after the instructional cycle to explore learners' experiences with pronunciation feedback from both AI tools and teachers. The interviews focused on three key areas: (1) learners' perceptions of AI-generated feedback, including its clarity, usefulness, and emotional impact; (2) learners' perceptions of teacher-provided feedback, particularly in terms of explanation, support, and credibility; and (3) learners' strategies for integrating feedback from both sources in their pronunciation practice. Drawing on the Feedback Literacy framework and the Interactionist SLA perspective, the interviews elicited how learners noticed, interpreted, and responded to feedback, as well as how they strategically used it to improve their pronunciation. While a set of core questions ensured consistency across interviews, the semi-structured format allowed for flexible follow-up questions to probe participants' experiences and emerging themes in greater depth (Dörnyei, 2007). All interviews were audio-recorded and transcribed with participants' consent (see Appendix C for the interview guide).

Data analysis

Thematic analysis proceeded through Braun and Clarke's (2006) six phases. Phase 1, familiarization, involved multiple readings of diaries, reflections, and transcripts while also memoing. Data triangulation was conducted across learner diaries, reflections, and interview transcripts to enhance the credibility of findings. Emerging themes and interpretations were compared across data sources to identify recurring patterns as well as inconsistencies. Phase 2, initial coding, happened with a combination of deductive lenses (interactional processes: noticing, output modification; feedback-literacy processes: interpretation, affect management, strategies enactment) and inductive openness to emergent categories. A sample of the theory-driven coding scheme, including code names, definitions, and representative extracts, is provided in Appendix D.

In phases 3 and 4, codes were clustered and refined to capture higher-order themes that reflected (a) experiences and comparisons of AI vs. teacher feedback in the context of learning interactions, and (b) intentional strategy use for the integration of AI and teacher feedback. In Phase 5, themes were reviewed and tested for internal coherence, alignment with the data set, and adherence to the research question, while also examining deviant cases to help check robustness of themes (Stake, 2005). Appendix E illustrates the inductive theme-development process from extracts and initial codes to broader categories and themes. In phase 6, themes were defined and named, while also being presented with rich descriptions and representative excerpts.

Trustworthiness and credibility

In line with Adler's (2022) emphasis on transparency in qualitative research, the study first documented its theoretical orientation, data sources, and analytic procedures. To further strengthen credibility, methodological triangulation was achieved through journal diaries, written reflections, and semi-structured interviews. In addition, member checking allowed participants to review interview transcripts and confirm interpretations. Finally, a research journal recorded methodological decisions and researcher reflections, supporting credibility, dependability, and confirmability.

Ethical considerations

The research was conducted in accordance with the "Ethical Principles of Psychologists and Code of Conduct" (2002). Approval from the institution had been sought prior to the collection of the data for the research. All the participants had given written informed consent. Permission had also been sought from the participant to record the audio for the research activity. Confidentiality of the participant's information had been maintained. All the concerns with regard to the participant's dignity and the cultural setting had also been addressed during the course of the research activity.

Findings

Learners' perceptions of pronunciation feedback reflected a complex interplay of attitudes, with AI-generated feedback eliciting both enthusiasm and skepticism, while teacher-provided feedback evoked a range of responses, including trust, anxiety, and reassurance. These perceptions also shaped how learners strategically integrated both sources in their pronunciation practice.

Learners' perceptions of AI-generated pronunciation feedback

Participants generally perceived AI-powered tools such as IELTSAce and SpeechAce as helpful resources that provided immediate and detailed pronunciation feedback. Many

learners appreciated the tools' ability to highlight both strengths and weaknesses in their pronunciation. For example, as P1 explained:

Tools such as IELTSAce and SpeechAce provide me with feedback on errors that need to be improved, as well as the things that I do correctly. It's very heartening to be able to recognize that certain aspects of my pronunciation skills are sound. (P1, Interview)

Similarly, P3 noted that the tools were useful in identifying specific pronunciation problems, stating that "the mistakes that AI recognizes, for example, not adding the sound /d/ at the end of 'method' or /s/ of 'songs'" helped her notice missing sounds (P3, Diary, March 9, 2025). Learners also valued the phonetic information provided by the applications. For example, P5 reported that "the IPA symbols help me understand what sound I did wrong" (P5, Interview). These comments suggest that learners perceived AI feedback as a precise diagnostic resource that could reveal pronunciation problems at a detailed phonological level.

Another advantage highlighted by participants was the immediacy and accessibility of AI feedback. Because the tools could be used at any time, students felt they had greater control over their learning process. As P2 noted in a diary entry, "I can always practice at home without disturbing anyone and on my own schedule. I used them to practice (read out loud, free talk, or answer short questions with various topics)" (P2, Diary, March 13, 2025). Similarly, P4 explained that instant feedback encouraged repeated practice: "When I use the app, I can immediately see if my pronunciation is correct and try again, so I repeat the sentence until I feel more confident with it" (P4, Reflection).

Participants also described AI-powered tools as low-pressure environments that allowed them to experiment with pronunciation without fear of social judgment. As P4 explained, "When I practice with the app, I don't feel embarrassed even if I pronounce something wrong because no one is listening to me" (P4, Interview). Likewise, P2 reflected that "the app feels like a safe place to practice because I can repeat difficult words many times without worrying about what other people think" (P2, Reflection). These responses indicate that AI-powered tools created a psychologically comfortable learning environment that encouraged learners to experiment and practice more freely.

Despite these advantages, participants also reported frustrations with the accuracy and presentation of AI feedback. In particular, learners expressed concern when the applications highlighted large portions of their speech as incorrect, even when they believed that only minor errors were present. As P5 described in the interview:

Other times, I may make only one or two small mistakes, but the tools highlight all of the lines in red; like I have done everything wrong. It gets confusing because, well, I don't know which sounds actually cause trouble. I listen again, and to me, my pronunciation sounds fine. But the app keeps marking it wrong. This makes me question whether the system understands my accent or if there's something minor I'm missing. I really would wish that it showed me exactly where the error is instead of turning everything red. (P5, Interview)

Other participants reported similar experiences. For example, P3 wrote in her diary that "the app has marked everything red; it's stressful to view. It should only highlight the areas where I got it wrong" (P3, Diary, March 18, 2025). Reflecting on this experience later, she noted that when "everything becomes red, I focus more on fixing the marks than on speaking naturally" (P3, Reflection). Likewise, P2 commented that "too many red marks unsettle me. I feel as though I am failing despite getting it right" (P2, Interview). P5 also recorded that "it feels like the app is overwhelming, especially when attempting to focus on the intonation" (P5, Reflection). Taking everything into account, the message

is that excessive corrective feedback can be counterproductive, ultimately leading to increased stress levels.

Overall, learners' experiences with AI-generated pronunciation feedback reflected a mixture of appreciation and skepticism. On the one hand, tools such as IELTSAce and SpeechAce were valued for providing immediate and detailed feedback that supported independent practice. On the other hand, learners occasionally questioned the clarity and reliability of the feedback when corrections appeared excessive or insufficiently specific. These findings suggest that while AI-powered tools play an important role in supporting pronunciation practice, learners remain aware of their limitations and continue to evaluate the feedback critically.

Learners' perceptions of teacher-provided pronunciation feedback

Compared with AI-generated feedback, participants generally perceived teacher feedback as more credible and contextually meaningful. Students often associated teacher feedback with professional expertise and pedagogical explanation. As P5 noted, "Teachers are trained, so I trust them more" (P5, Interview). This perception of credibility was further reinforced by the teachers' ability to provide explanations for pronunciation problems rather than merely indicating errors. As P2 explained, "Teachers tell me why my stress pattern sounds unnatural and how to fix it. The app just says it's wrong" (P2, Interview). Similarly, P3 observed that teacher feedback often included explanations connected to real communication contexts: "When my teacher explains a sound, she also shows how it changes meaning or rhythm in the sentence" (P3, Reflection). These responses suggest that learners valued teacher feedback not only for its accuracy but also for the interpretive guidance it provided.

Another important aspect highlighted by participants was the memorable nature of teacher feedback. Several learners noted that explanations provided by teachers tended to remain in their memory longer than automated feedback from applications. As P3 reflected, "When my teacher explains what went wrong, I remember it longer than when the app marks red" (P3, Interview). Similarly, P1 wrote in a reflection that "when the teacher demonstrates how to pronounce a word and asks us to repeat it together, the correction stays in my mind more clearly than when I see it on the app" (P1, Reflection). These comments suggest that teacher feedback may support deeper learning because it often involves explanation, demonstration, and interaction.

At the same time, learners reported mixed emotional reactions toward teacher feedback. While they recognized its value, receiving corrections directly from a teacher sometimes triggered feelings of anxiety or pressure. As P4 admitted, "Receiving feedback from a teacher makes me feel anxious" (P4, Interview). P2 expressed a similar concern in her reflection, noting that "when the teacher corrects my pronunciation in class, I worry that other learners will notice my mistakes" (P2, Reflection). This anxiety appeared to be related to the social context of classroom feedback, where mistakes may be publicly visible. These responses indicate that although teacher feedback was considered valuable, it could also create emotional pressure for learners.

Participants also identified accessibility as a limitation of teacher feedback. Unlike AI-powered tools, which could provide immediate responses at any time, teacher feedback was usually limited to classroom sessions. As P2 explained, "I have to wait till the next class to ask questions. By that time, I might forget what I said wrongly" (P2, Interview). P1 expressed a similar concern in her reflection, noting that "sometimes I realize I mispronounced a word when practicing at home, but I have to wait until the next class to ask the teacher about it" (P1, Reflection). This delay sometimes reduced the

usefulness of teacher feedback because learners could not immediately clarify their doubts.

Overall, learners perceived teacher feedback as highly reliable and pedagogically valuable because it provided explanation, demonstration, and personalized guidance. However, the classroom context sometimes created anxiety, and the limited accessibility of teachers meant that feedback was not always immediately available. These contrasting characteristics highlight why learners often rely on both teacher and AI feedback as complementary resources in their pronunciation learning.

Learners' strategy for integrating AI and teacher feedback

The data revealed that learners did not simply receive feedback passively. Instead, they actively developed strategies to interpret, evaluate, and apply feedback from both AI-powered tools and teachers. These strategies reflected learners' growing ability to regulate their learning processes and demonstrated emerging feedback literacy.

Feedback-seeking and self-correction strategies

Participants frequently used AI-generated feedback as a tool for repeated practice and self-correction. Because the applications provided immediate evaluation, learners were able to attempt the same task multiple times until they achieved a satisfactory outcome. As P1 explained:

I practice until the app realizes that I have made no errors, sometimes after lots of tries. Then I contrast my audio recordings against the example to evaluate whether I speak more like a native speaker. And sometimes I record the same sentence ten times because I need the green score marker and audio feedback to be in tune. This is exhausting, but it has helped me become more conscious of tiny variations in pronunciation, in terms of where I should place the tongue and the length of vowels. (P1, Interview)

This explanation illustrates how learners used automated feedback as a motivational indicator to guide their practice. A similar pattern appeared in learners' diaries. For instance, P2 narrated, "Today, I practiced the phrase 'around the world' many times until IELTSAce finally gave me a green score. It felt very rewarding" (P2, Diary, March 22, 2025). The repeated attempts described by the participants suggest that learners engaged in deliberate and persistent practice in response to AI feedback.

Participants also demonstrated reflective strategies when dealing with recurring pronunciation difficulties. Instead of repeating tasks mechanically, some learners monitored patterns in their mistakes and adjusted their practice accordingly. As P3 explained, "I write down mistakes I keep making, then focus on those sounds next time" (P3, Reflection). Similarly, P4 noted that keeping track of difficult sounds helped her structure future practice sessions: "When I notice that I keep mispronouncing a particular word or sound, I make a note of it and practice it again later" (P4, Reflection). These practices indicate that learners were actively interpreting feedback and using it to guide future learning.

Additionally, the participants compared feedback from different sources to verify their understanding of pronunciation problems. For example, P5 explained, "If my teacher and the app don't agree, I record again to figure out which one is correct" (P5, Reflection). In another reflection, the same participant described listening carefully to both the teacher's explanation and the AI feedback before deciding how to correct the pronunciation: "Sometimes I repeat the word several times and compare both comments until I feel sure about which pronunciation is right" (P5, Reflection). These comments

illustrate that learners were not simply accepting feedback automatically; instead, they were evaluating and reconciling multiple feedback sources.

Overall, these behaviors demonstrate learners' active engagement with feedback. Through repeated practice, self-monitoring, and comparison of feedback sources, learners developed strategies that supported both self-regulation and pronunciation improvement.

Resource-combination strategies

Another prominent pattern in the data was learners' strategic combination of AI-generated and teacher feedback. Rather than relying exclusively on one source, learners used the two types of feedback for different but complementary purposes. As P3 explained in the interview, "AI helps me every day with drills, but teachers help me with stress and fluency" (P3, Interview). This comment illustrates how learners distinguish between the strengths of technological tools and human guidance.

Several participants described a sequential strategy in which AI-powered tools were used for initial practice, followed by teacher consultation for deeper explanation. P5 provided a detailed description of this process:

First, I begin with IELTSAce or SpeechAce to evaluate how I am vocalizing and which bits are highlighted in red. Next, I use the findings to ask my teacher why specific sounds need to be corrected. Even though the app shows me which sounds I am doing wrong, it is reassuring for me to know that my teacher also assists me with explaining why and how the sounds need to be corrected. (P5, Interview)

Reflection and interviews also demonstrated how learners incorporated this strategy into their regular study routines. For example, P1 shared, "I use IELTSAce first to check my sounds and then confirm with my teacher later. Combining both gives me confidence" (P1, Reflection). Similarly, P2 described AI practice as a preparation stage before classroom feedback, noting that SpeechAce served as a "safe trial" where she could test her pronunciation before asking the teacher for further clarification (P2, Interview).

Furthermore, the participants emphasized that teacher explanations helped them interpret AI feedback more effectively. As P3 explained, "After the AI practice, my teacher helps me understand why the sound is wrong in real speech" (P3, Interview). Likewise, P4 reflected that "the app shows where the problem is, but the teacher explains how to correct it in conversation" (P4, Reflection). These responses indicate that learners viewed AI and teacher feedback as serving distinct but complementary functions.

In short, these findings suggest that learners developed a flexible "feedback ecosystem" in which AI-powered tools supported frequent practice and immediate correction, while teachers provided deeper explanation and contextual guidance. By combining these two resources, learners were able to balance efficiency with understanding, thereby sustaining their pronunciation learning over time.

Discussion

This paper underlines learners' ability to merge AI-based and teacher feedback; therefore, a flexible approach would allow for both autonomy and guidance. Grounded in Interactionist SLA theory and informed by the Feedback Literacy framework, the findings demonstrate that learners actively evaluated, interpreted, and strategically used feedback from both AI-powered tools and teachers to support pronunciation development. While several findings align with previous research, this study also reveals differences that deepen understanding of how learners negotiate multiple feedback sources in AI-mediated language learning contexts.

Consistent with previous studies on AI-assisted pronunciation learning (Pham & Nguyen, 2023; Sun et al., 2023), learners valued AI-powered tools such as IELTSAce and SpeechAce for their immediacy, accessibility, and capacity to support repetitive practice. This fits well into the Interactionist perspective on SLA because the latter sees learning as an iterative and cyclical process consisting of interaction, improvement, and modification (Gass & Mackey, 2014; Long, 1996). Many learners indicated they persisted and practiced until they reached a “green score,” whereas others indicated AI-assisted activities as low-pressure dress rehearsals prior to classroom evaluation (Bouchhioua, 2024). However, unlike studies that portrayed learners primarily as satisfied users of AI systems (Pham & Nguyen, 2023), the participants in this study demonstrated a more critical orientation toward automated feedback. Rather than fully trusting AI evaluations, learners frequently questioned inconsistent scores across applications and expressed uncertainty regarding the accuracy of automated corrections. This difference may result from the comparative focus of the present study, where learners evaluated AI feedback alongside teacher feedback rather than in isolation. As learners frequently cross-checked AI corrections with teacher explanations, they became more aware of the limitations of automated systems. This finding aligns more closely with Roe et al. (2024) and Isotalus et al. (2025), who argued that learners’ trust in AI feedback decreases when feedback lacks transparency or interpretive explanation. From a feedback literacy perspective, such selective trust reflects critical engagement, as learners actively evaluated which feedback source appeared more reliable and contextually appropriate.

Another important finding concerns the continuing authority of teacher feedback. Similar to Du and Daniel (2024) and Zhang et al. (2025), learners in this study regarded teachers as the most credible and context-sensitive source of pronunciation feedback. Participants emphasized that teachers not only corrected pronunciation errors but also explained why errors occurred and how pronunciation influenced communication. Such findings reinforce the argument that teacher feedback contributes dimensions of interpretation, communicative nuance, and interpersonal support that AI systems cannot yet fully replicate. However, unlike some previous studies that presented teacher feedback mainly as positive and supportive, this study also revealed learners’ emotional tension during face-to-face correction. Several learners reported anxiety, embarrassment, or fear of negative judgment when corrected publicly in class. This finding differs from studies that emphasized the emotional supportiveness of teacher feedback (Du & Daniel, 2024) and may reflect contextual or cultural influences within Vietnamese EFL classrooms. In contrast, AI feedback was perceived as emotionally neutral because learners could practice privately without fear of judgment, supporting Susanto’s (2025) argument that AI-powered tools help reduce emotional pressure during speaking practice. These findings suggest that the emotional impact of feedback depends not only on the feedback source itself, but also on how feedback is delivered and experienced in specific learning contexts.

A further contribution of this study lies in showing how learners strategically integrated both feedback sources within the same learning process. Similar to findings by Vo and Nguyen (2024), participants frequently used AI-powered tools for immediate practice and then relied on teachers to verify, clarify, or contextualize feedback afterward. However, the current study extends previous research by demonstrating that learners did not simply alternate between feedback sources; instead, they assigned distinct pedagogical roles to each one. AI feedback was associated with speed, repetition, and independent practice, whereas teacher feedback was associated with validation, explanation, and emotional reassurance. This complementary relationship supports

Zhang et al.'s (2025) claim that learners trust AI feedback more when it is connected to teacher guidance.

Duong and Nguyen (2024) warned that excessive dependence on AI-powered tools may reduce learners' critical thinking. In the present study, learners did not passively accept automated corrections. Instead, they compared feedback sources, reflected on inconsistencies, and selectively applied corrections according to context. One possible explanation for this difference is that the participants were not using AI-powered tools independently in isolation, but within a broader learning ecology where teacher feedback remained available. The presence of teacher mediation may therefore encourage reflective rather than dependent use of AI-powered tools. This suggests that the educational impact of AI feedback may depend less on the technology itself and more on how learners are guided to interpret and integrate feedback within classroom practice.

In brief, the findings support the view that pronunciation learning benefits most from a balanced integration of technological and human feedback. From an Interactionist SLA perspective, both AI and teacher feedback contributed to noticing, hypothesis testing, and pronunciation modification. Simultaneously, the Feedback Literacy framework helps explain how learners interpreted feedback cognitively and emotionally while developing strategies to use feedback productively. By combining technological precision with human explanation and emotional support, learners constructed a flexible feedback ecology that promoted autonomy, confidence, and meaningful engagement in pronunciation learning.

Conclusion

This study explored how Vietnamese EFL learners perceived and integrated AI-generated and teacher-provided pronunciation feedback. The findings show that AI tools such as IELTSAce and SpeechAce supported pronunciation learning by offering immediate, detailed, and low-pressure opportunities for repeated practice. However, learners did not rely on AI feedback uncritically; they questioned unclear or excessive corrections and often turned to teachers for clarification and validation. Teacher feedback, in contrast, was valued for its credibility, explanation, contextual relevance, and emotional support, although classroom-based correction sometimes created anxiety.

The study contributes to research on technology-enhanced pronunciation learning by showing that learners developed a complementary feedback routine rather than treating AI and teacher feedback as competing sources. From an Interactionist SLA perspective, AI feedback helped learners notice errors and modify output through repeated practice, while teacher feedback supported deeper interpretation and communicative understanding. From a feedback literacy perspective, students demonstrated emerging ability to evaluate, compare, and strategically use feedback from multiple sources.

Pedagogically, the findings suggest that AI pronunciation tools such as IELTSAce and SpeechAce should be integrated as supportive resources rather than replacements for teacher feedback. Therefore, teachers should be trained not only to use AI tools technically but also to integrate them meaningfully into lesson plans (Esmailzadeh et al., 2025). In classroom practice, teachers can help learners interpret automated corrections, evaluate feedback reliability, and connect AI-generated feedback to meaningful pronunciation use in communication.

This study has several limitations. It involved only five English majors from one Vietnamese university, so the findings are not intended to be generalized to all EFL learners. The data were also based mainly on learners' self-reports rather than objective measures of pronunciation improvement. Finally, the study focused only on IELTSAce

and SpeechAce, and future research could examine other AI pronunciation tools, involve larger learner groups, and gather more comprehensive evidence of pronunciation development.

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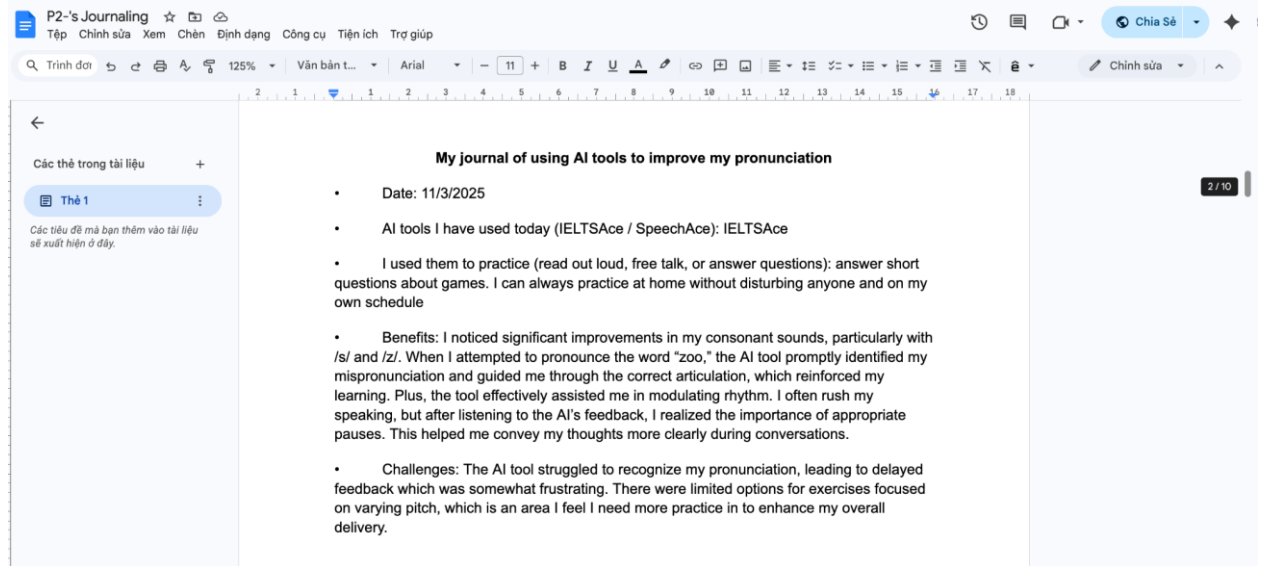
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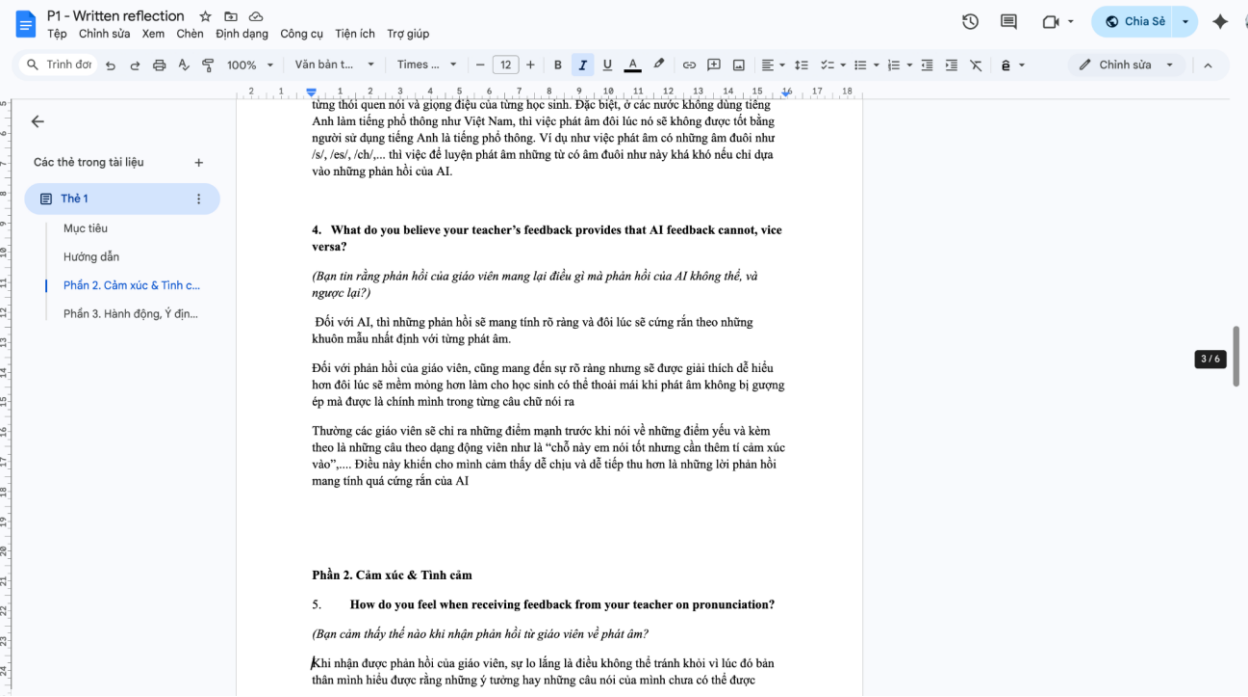
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Appendix A: A screenshot sample diary from P2 (March 11, 2025)



Appendix B: A screenshot sample written reflection from P1



Appendix C: Interview guide

Voices in Feedback: A Dual-Theoretical Exploration of Learners' Perception Towards Teachers versus AI-powered tools

1. Introduction

- Thank you for participating in this interview.
- The purpose of this interview is to understand your experiences with pronunciation feedback from AI-powered tools and your teacher.
- There are no right or wrong answers. Please feel free to share your honest opinions and experiences.
- Your responses will be kept confidential and used only for research purposes.
- With your permission, I would like to record this interview. Is that okay?

2. Warm-up questions

- Can you briefly describe how you usually practice English pronunciation?
- What AI-powered tools (if any) do you use for pronunciation practice?

3. Main Interview Questions

Theme 1: Learners' Perceptions of AI-Generated Pronunciation Feedback

- How does AI feedback help you understand your pronunciation errors?
- How clear and reliable do you find the feedback from AI-powered tools?
- How do you feel when the AI marks your pronunciation as incorrect?
- What are the main strengths or limitations of AI feedback for you?

(Optional probes: Can you give an example? Why do you think so? What do you usually do after receiving that feedback?)

Theme 2: Learners' Perceptions of Teacher-Provided Pronunciation Feedback

- How does your teacher help you understand and correct your pronunciation?
- In what ways is teacher feedback different from AI feedback?
- How do you feel after receiving feedback from your teacher?
- Which aspects of pronunciation are better explained by your teacher?

(Optional probes: Can you compare a situation with AI vs teacher? Which one helps you more in that case?)

Theme 3: Learners' Strategies for Integrating AI and Teacher Feedback

- How do you use AI-powered tools and teacher feedback together in your learning?
- Do you usually use AI-powered tools before or after asking your teacher? Why?
- How do you decide which feedback to rely on (AI or teacher)?
- What challenges do you face when combining both types of feedback?

(Optional probes: Can you describe your typical learning process step by step? What do you do when AI and teacher feedback are different?)

4. Closing

- Is there anything else you would like to share about your experience with pronunciation feedback?
- Thank you very much for your time and participation.

Appendix D: Sample of theory-driven coding scheme

Theoretical Framework	Code	Definition	Representative Extract
Feedback literacy	Feedback appreciation	Recognizing the usefulness and value of feedback	“Tools such as IELTSAce and SpeechAce provide me with feedback on errors that need to be improved, as well as the things that I do correctly.” (P1, Interview)
Interaction theory	Noticing errors	Recognizing pronunciation errors through feedback	“The mistakes that AI makes, for example, not adding the sound at the end of ‘method’, ‘songs’.” (P3, Interview)
Feedback literacy	Affect management	Emotional reactions toward feedback	“Too many red marks unsettle me. I feel as though I am failing despite getting it right.” (P2, Interview)
Feedback literacy	Feedback interpretation	Understanding and evaluating feedback	“Teachers tell me why my stress pattern sounds unnatural and how to fix it. The app just says it’s wrong.” (P2, Interview)
Interaction theory	Output modification	Repeating or modifying pronunciation after feedback	“I practice until the app realizes that I have made no errors, sometimes after lots of tries.” (P1, Interview)
Feedback literacy	Strategy enactment	Using feedback intentionally to improve pronunciation	“I use IELTSAce first to check sounds and then confirm with my teacher later.” (P1, Diary, March 25, 2025)
Feedback literacy	Comparing feedback sources	Comparing AI and teacher feedback	“If my teacher and the app don’t agree, I record again to figure out which one is correct.” (P5, Reflection)

Appendix E: Illustration of inductive theme development

Data Extract	Initial Code	Category	Theme
“The app has marked everything red; it’s stressful to view.” (P3, Diary Entry, March 18, 2025)	Everything red; stressful	Stress from AI corrective feedback	Experiences with AI-generated feedback
“Too many red marks unsettle me. I feel as though I am failing despite getting it right.” (P2, Interview)	Too many red marks unsettle me	Feeling overwhelmed by corrective feedback	Experiences with AI-generated feedback
“Teachers tell me why my stress pattern sounds unnatural and how to fix it. The app just says it’s wrong.” (P2, Interview)	Teachers explain why and how	Teacher feedback clarity	Experiences with teacher feedback
“Receiving feedback from a teacher makes me feel anxious.” (P4, Interview)	Feel anxious	Anxiety toward teacher feedback	Experiences with teacher feedback
“I practice until the app realizes that I have made no errors.” (P1, Interview)	Practice until no errors	Repeated pronunciation practice	Feedback-seeking and self-correction strategies
“I write down mistakes I keep making, then focus on those sounds next time.” (P3, Reflection)	Write down mistakes	Focusing on repeated pronunciation problems	Feedback-seeking and self-correction strategies
“I use IELTSAce first to check sounds and then confirm with my teacher later.” (P1, Diary, March 25, 2025)	Use IELTSAce first; confirm with teacher	Combining AI and teacher feedback	Resource-combination strategies
“AI helps me every day with drills, but teachers help me with stress and fluency.” (P3, Interview)	AI for drills; teachers for stress and fluency	Different roles of AI and teacher feedback	Resource-combination strategies