

Surpass Chatbots and Human Teachers? Explore the Effectiveness of Conversational AI in Language Learning

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Abstract

Conversational Artificial Intelligence (ConvAI) has evolved from early rule-based systems and simple chatbots (e.g., Siri) to complex learning tools enabled by large language models, opening up new possibilities for language education. ConvAI is a type of AI that enables computers to understand, process, and respond to human language in a natural and human-like way. The introduction of ConvAI to language learning is especially timely and meaningful, as it overcomes the limitations of traditional learning methods, such as limited practical scenarios, mechanical or unengaging feedback, and high human costs. ConvAI systems, sometimes represented as avatar, can simulate real-life conversations, provide immediate correction, and offer adaptive learning options as well as context-aware feedback. This study evaluated the effectiveness of ConvAI in language education from two ConvAI-enabled language learning tools: Loora and Talkpal. Detailed differences between these two platforms are summarized. Moreover, the overall analysis reveals that ConvAI-enabled learning tools can break temporal and spatial barriers for language learning, offer highly personalized and adaptive learning experiences, provide vivid, immediate, and granular feedback to language learners, democratize learning costs, and ultimately enhance students' grammatical accuracy and overall English proficiency. Our study also highlights key challenges in ConvAI-enabled language learning tools, such as limited depth, lack of human interaction, difficulties in fully replicating cultural and contextual nuances, and data privacy risks. Finally, we compare learning practices between human teachers and ConvAI avatar teachers. The comparison results arouse educators' attention on effective Human-ConvAI collaboration in language learning.

Keywords: conversational AI, language learning, effectiveness

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Introduction

Conversational Artificial Intelligence (ConvAI) enables computers to understand, process, and respond to human language naturally through text or speech. It integrates multiple technologies including Natural Language Processing (NLP) with Automatic Speech Recognition (ASR), Machine Learning, Deep Learning and advanced image processing (Zawacki-Richter et al., 2019), with an aim to achieve seamless interaction between humans and machines (Chigbu & Makapela, 2025). ConvAI's evolution has progressed from early rule-based systems like ELIZA (Weizenbaum, 1966) to contemporary large language model-driven systems (e.g., GPT series), which possess improved comprehension, contextual memory, and generative capabilities (Wu et al., 2024). ConvAI is increasingly moving from general purpose chatbots to specialized applications, and language education field is emerging as a key application domain.

The integration of ConvAI into language education offers significant advantages over traditional approaches. It addresses global teacher shortages, provides timely feedback that guarantee learning effectiveness, and delivers scalable, personalized instruction (Alkishri et al., 2025). Moreover, ConvAI makes language learning more resourceful, more interactive, thus reducing language learning anxiety (Ji et al., 2022). Language learning is about continuous interaction with teacher, Interaction Theory (Kinging, 2001) well explains the roles of language teachers as well as ConvAI tools for language learning. Though ConvAI has significant benefits for language learners and teachers, like other AI tools, it also carries risks and challenges. Current ConvAI technology exhibits limitations in handling specialized subjects and cultural nuances. ConvAI models may also suffer from hallucinations and algorithmic bias, demonstrate emotional deficits compared to human tutors in expressing sentiment, and raise ethical concerns regarding user data privacy (Aslan et al., 2025).

To evaluate the effectiveness and limitations of ConvAI in language education, we selected two of the most typical ConvAI based learning tools in the market: Loora and Talkpal and have a thorough investigation and comparison between these two. The functionalities and impact on users are compared and discussed. At the same time, we also summarized the major challenges and risks in using these ConvAI tools. Furthermore, this paper compares the differences between ConvAI and human tutors, exploring potential avenues for complementary strengths. Our research results can provide a reference for educators, technology developers, and relevant stakeholders regarding the appropriate use of ConvAI, thereby advancing the optimization and innovation of ConvAI in language education.

Literature Review

Existing Research on Conversational AI in Language Learning

Existing research indicates that ConvAI tools can create learning environments and opportunities for language learners that traditional teaching methods struggle to provide.

Recent studies have explored the integration of AI-supported communication tools in language learning. Shadiev et al. (2025) reviewed 31 studies published between 2010 and 2024 and identified a range of AI technologies used to support language learning. This includes conversational agents, speech-recognition systems, and advanced AI-powered chatbots. Their findings prove that these ConvAI tools have positive effects on speaking performance, communication competence, and learner motivation, while also highlight challenges such as

technical limitations and insufficient teacher support. Similarly, Dai and Wu (2025) found that AI-assisted speaking practice enhanced learners' engagement and oral performance, with real-time feedback emerging as a particularly valuable feature. What is more, AI-supported speaking tools are also associated with gains in language learning fluency, pronunciation, confidence, motivation, and willingness to communicate (Xing & Saeed, 2025). However, existing reviews also show that chatbot-supported language learning remains limited by speech-recognition errors, inconsistent corrective feedback, uneven dialogue quality, learner-level mismatch, and insufficient integration with teacher-guided pedagogy (Chua & Annamalai, 2025). Therefore, while current evidence supports the pedagogical potential of ConvAI, more practice-oriented evaluation is needed to determine how commercial platforms function in authentic learning contexts and whether they can provide sustained, culturally sensitive, and pedagogically reliable support alongside human teachers.

Major Theories Suitable to Explain the Use ConvAI in Language Learning

Based on the investigation of past literature, we summarized four major theories suitable to explain the effectiveness of ConvAI in language learning. They are Task-Based Language Teaching, Willingness to Communicate Theory, Self-Determination Theory, and the Affective Filter Hypothesis. First, Task-Based Language Teaching (TBLT) focuses on the use of authentic language to complete meaningful tasks in the target language, such as visiting a doctor or calling customer service for help. Assessment is primarily based on task outcomes rather than on accuracy of language use (Ellis, 2022). ConvAI is believed to be able to provide interactive real-world speaking practices for the language learners, to cope with scenario and task-based language learning. Second, in the second language learning context, MacIntyre et al. (1998) cited Willingness to Communicate (WTC) Theory to explain the extent to which learners are prepared to communicate with a specific interlocutor in a second language at a given moment. The willingness is influenced by situational WTC such as immediate states, self-confidence, and social/environmental influences (Zhang et al., 2018). WTC makes a key concept to understand spoken participation in a second language. ConvAI tools using robot or humanoid robot as significant interlocutor reduces the pressure from peer, group and classroom environment, thus boost confidence and minimize anxiety when learning secondary language. Third, Deci and Ryan (1985) introduced Self-Determination Theory, which focuses on understanding human's motivation and personality. They believe human's motivation ranges from unmotivated to fully self-determined, while intrinsic motivation represents the highest form of self-determination. Intrinsic motivation is embedded in enjoyment, challenge, or inherent satisfaction of the activity itself. If a learner intrinsically enjoyed "playing" around the ConvAI tool, satisfied with the personalized and immediate feedback, then they will be greatly motivated to learn better. Last, the Affective Filter Hypothesis is a concept in second language acquisition developed by linguist Stephen Krashen. It proposes that a learner's emotional states, such as anxiety, fear, embarrassment, motivation, self-confidence, act as an invisible psychological "filter" that can either block or allow the language input necessary for fluency (Krashen, 1986). A low psychological filter allows more input while a high filter may hinder (Du, 2009). ConvAI platforms can effectively reduce emotional filtering and alleviate communication anxiety and the fear of negative evaluation by providing a private and non-judgmental practice environment. Therefore, the Affective Filter Hypothesis can also apply to the research context of ConvAI in language learning.

Research Gaps and Our Research Interests

Existing literature demonstrated ConvAI's vast potential in language learning. However, there are also gaps in the past studies that our research would like to fill in.

First, there is a lack of systematic evaluation of commercialized ConvAI learning tools. Existing studies mostly use self-built experimental systems or single chatbots to evaluate their effectiveness. The comparison between several mature commercial platforms in language learning is rare. Second, research on human-AI comparison is insufficient. Although many studies have verified the effectiveness of using ConvAI tools, the study of directly comparing it with human teachers is limited. Language learning involves multi-dimensional elements such as emotional connection, cultural understanding and interpersonal interaction. This is not to be accomplished without human-AI collaboration. A systematic comparison of the differences between the two is important to understand the human-AI collaborative teaching model. Third, our study is among the pioneer studies to summarize the major theories used in ConvAI-based language learning context.

Based on the above discussions of the gaps in literature, this study selects two commercial ConvAI tools, Loora and Talkpal, and systematically evaluate their effectiveness and limitations in language learning. We further compare the differences between ConvAI tools and human teachers. We believe this study can provide some theoretical basis and practical summary for human-AI collaborative language teaching and learning.

Case Study on Loora and Talkpal

Case 1: Loora

Loora is an AI-powered English language learning platform that utilizes customized Large Language Models (LLMs) to simulate natural dialogue and support learners in a low-stakes, adaptive environment. Unlike traditional language learning applications that rely on pre-scripted content, Loora is an example of ConvAI applied to language education. It enables interactive practice and real-time feedback that were once limited to human-led instructions. Positioned as a premium speaking practice tool for serious English learners, Loora targets users with some language foundation who seek fluency for professional or academic purposes (Lunden, 2023). So far, Loora occupies the premium segment of the AI language learning market, distinguishing itself through specialized LLM customization and comprehensive feedback mechanisms.

Core Features and Pedagogical Design

Loora's pedagogical design is built around three core technological features:

Feature 1: Customized Large Language Models (LLMs) for Natural Dialogue. Loora uses customized LLMs that have been specifically optimized for English language education. It developed its own LLMs in 2020 but also used a variety of third-party LLMs for different pedagogical tasks, such as initiating conversations, managing ongoing dialogues, tackling diverse topics, and assisting users with memory recall (Lunden, 2023). Customization was embodied when answers from the LLMs are contextually relevant, and able to adjust based on the current conversational status. For example, you can ask Loora's AI tutor to help you practice interview skills based on your job applied and with your current knowledge and skill

sets. The advantage of this is that users can practice English in real-life conversation with no judgement and pressure.

Feature 2: Real-Time Feedback. By combining ASR and NLP, Loora delivers immediate, actionable feedback. ASR can accurately transcribe a user's speech into text, which demonstrates consistent robustness even when faced with various accents (Maricheva & Kyrychenko, 2026). Then, NLP analyzes the transcribed text across several dimensions, such as grammatical errors, lexical appropriateness, and pragmatic competence (Stryker & Holdsworth, 2026). Loora provides pronunciation guidance by analyzing speech patterns against native speaker models and providing specific feedback on intonation and pronunciation. This real-time feedback is critical for preventing language from becoming “fossilized”. Figure 1 illustrates a classical example of Loora's feedback mechanism. It shows how the system transforms a learner's spoken or written output into immediate corrective guidance. Such feedback enables learners to clearly recognize their linguistic errors and supports them in making timely self-corrections in speaking practice.

Figure 1

Loora's Feedback for Speaking Practice



Feature 3: Contextual Understanding and Progress Visualization. By learning contextual information from past conversational records, Loora can remember conversations and respond consistently with previous interactions. This guarantees coherent and personalized dialogue (Alieva, 2025). The understanding of conversational context transforms Loora from a simple error-correction tool into a personalized AI tutor that “remembers” individual learner's preferences, challenges, and progress. What is more, the platform provides a comprehensive visual dashboard that automatically tracks and displays learning progress. This includes the number of days spent studying, status of completed lessons, and a line chart showing the number of lessons completed over time (Loora, 2023). Through real-time access to the learning history, learners can develop metacognitive awareness: understanding learning patterns, identifying areas that require additional practice, and setting evidence-based goals.

Limitations and Challenges

Despite its many advantages, Loora faces some limitations. First, Loora is less effective for advanced or specialized conversational practice. Although Loora is positioned as a personal AI tutor capable of providing personalized conversations and real-time feedback, an evaluation by PracticeMe (2026) pointed out that its everyday conversation mode may not be deep enough for advanced learners. Secondly, given its functional limitations, Loora's high price (approximately US\$119 per year) is difficult to justify, particularly when compared to human tutors, free AI alternatives such as ChatGPT, and rival AI tools like Talkpal. This price pressure

may lead to user churn, especially among price-sensitive learners. Thirdly, Loora may struggle to maintain conversational coherence in longer interactions or across different sessions. According to PracticeMe (2026), Loora sometimes forgets the content of previous discussions or repeat prompts across different sessions. Such limitations may disrupt the natural flow of conversation and reduce thematic consistency over time. Finally, user privacy risks are a major concern, as Loora collects a significant amount of sensitive data (e.g., voice, location, and search history) from learners.

Case 2: Talkpal

Talkpal is an AI-powered language learning platform offering multilingual support, flexible interaction modes, and a relatively affordable price. Unlike Loora, which focuses specifically on English speaking practice, Talkpal supports more than 57 languages, which include English, Spanish, French, German, and Chinese, and less commonly taught languages such as Arabic, Turkish, Persian, and Afrikaans. The platform building on ConvAI is based on GPT architecture, and is designed to simulate natural conversations, providing learners with interactive opportunities to practice speaking, writing, listening and reading in a low-pressure digital environment. Consequently, its market positioning differs from that of Loora: whilst Loora focuses on professional English tuition and in-depth feedback tailored to a single target language, Talkpal places greater emphasis on breadth, ease of use and a flexible, multilingual learning experience.

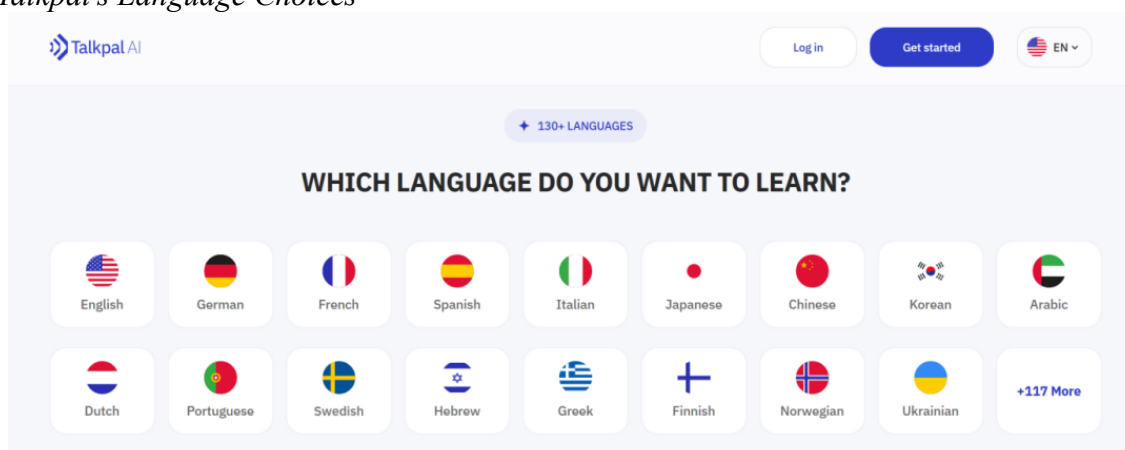
Talkpal's core value lies in providing learners with a more cost-effective and flexible alternative to traditional language tuition. According to Dunham (2026), the platform offers a variety of interactive modes, such as casual chat, role-play, character-based dialogue, debates, telephone conversations, sentence exercises, vocabulary exercises, conversation practice and picture description. These modes enable learners to practice the language in a variety of communicative contexts, rather than relying solely on vocabulary or grammar exercises. Therefore, Talkpal holds appeal for learners who wish to be involved with multiple languages, undertake flexible speaking practice, and utilize AI-based conversation tools at a lower cost.

Core Features and Pedagogical Design

Talkpal combines GPT-powered ConvAI into a multi-modal language learning structure designed to support real-time, immersive language practice. Through text and voice interactions, Talkpal enables learners to express themselves, receive feedback, and adjust their expressions with a continuous cycle of conversation.

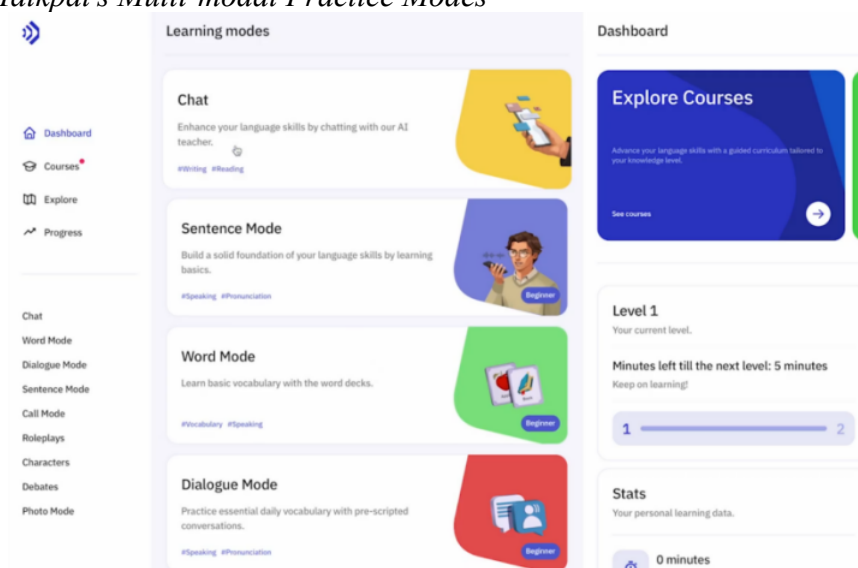
Feature 1: GPT-Powered ConvAI for Multi-language Dialogue. Talkpal uses a GPT-based conversational model to generate natural and context-sensitive dialogue across a wide range of languages and topics. Unlike scripted language learning applications, Talkpal allows open-ended interaction. Learners can discuss everyday topics, practice travel-related situations, or involve in more complex discussions depending on their proficiency level and learning goals (Padmanabhan, 2025). The platform's artificial intelligence can also adapt to the conversation content based on the learner's input, thereby creating a more personalized and responsive learning experience. The platform supports over 57 languages, which stands in stark contrast to the pedagogical approach of monolingual platforms such as Loora. Such extensive language coverage enables learners to undertake multilingual learning within a single system. Figure 2 shows examples of the languages available on Talkpal.

Figure 2
Talkpal's Language Choices



Feature 2: Multi-modal Interactive Modes for Scenario Practice. Talkpal has 9 innovative interaction modes, which are designed to cover different aspects of language learning. The Chat mode supports conversations based on general topics and provides grammar feedback. The Role-play mode simulates real-life situations such as ordering food, asking for directions, checking into a hotel, or attending a job interview. The Character Dialogue mode allows learners to interact with fictional or historical figures, making the exercises more vivid, involving and imaginative. Debate Mode encourages learners to express their views, construct arguments and employ more complex sentence structures. Call Mode focuses on speaking conversation practice, this helps to improve fluency and confidence in speaking. Furthermore, Sentence Mode, Dialogue Mode, Word Mode and Picture Mode provide more structured opportunities for grammar practice, vocabulary expansion and the use of descriptive language (Test Prep Insight, 2026). This multimodal framework provides learners with opportunities to repeatedly use language in context, which is crucial for developing communicative competence (Wang et al., 2017). It also maintains learner engagement by offering diverse content, reducing the monotony associated with repetitive digital exercises, and transforming practice into a more interactive experience. Figure 3 illustrates Talkpal's multimodal learning design, showcasing the various interaction modes available within a single platform.

Figure 3
Talkpal's Multi-modal Practice Modes



Feature 3: Progress Tracking and Gamified Engagement. Talkpal includes a progress tracking system, which makes the learning process more intuitive and quantifiable. The platform monitors metrics such as total study time, pronunciation performance, the number of exercises completed, the current number of consecutive days of study, and stage progress. It also provides feedback on grammar, vocabulary and pronunciation, helping learners identify specific strengths and weaknesses. This data-driven feedback helps to improve learners' self-awareness, as it encourages them to reflect on their learning patterns, track their progress and set more targeted goals. Gamified elements such as consecutive days of learning, badges, completed exercises and performance summaries also help to reinforce consistent learning habits (Julin, 2025). By visualizing learning progress, the platform encourages learners to monitor their own learning behavior and maintain a regular practice routine over the long term.

Limitations and Challenges

Despite its strengths, Talkpal has several limitations. Firstly, it lacks a structured learning pathway. While the platform offers a variety of interactive modes, it does not always guide learners through a systematic course that includes progressive grammar, vocabulary and skills development (Mammadzada, C., 2026). This can pose a challenge for complete beginners who require clear explanations and step-by-step guidance. As a result, Talkpal functions more like a practice tool than a complete language learning system. Secondly, Talkpal's freemium model creates practical limitations. The free version's daily usage limit of approximately 10 minutes is insufficient for meaningful language learning. Although paid subscriptions unlock a wider range of features, price-sensitive users may compare Talkpal with free tools such as ChatGPT and question whether its additional gamified interface justifies the extra cost. Finally, Talkpal's extensive coverage of over 57 languages presents challenges in terms of quality control, as mainstream languages may receive stronger support than less commonly taught ones (Dunham, 2026). Consequently, Talkpal is best understood as a flexible supplementary tool within a blended learning mode, rather than a complete substitute for teachers or real-life communication.

Comparison Between Loora and Talkpal

Table 1

Comparison Between Loora and Talkpal

Dimension	Loora	Talkpal	Analysis
Core Focus	English speaking proficiency	Multi-language learning, 57+ languages	Loora emphasises depth in English speaking, whereas Talkpal prioritises breadth through multilingual coverage
Technology Base	Self-developed LLM and third-party LLMs	GPT powered platform	Both platforms rely on advanced LLM-based ConvAI to support interactive language learning
Practice Mode	Scenario-based dialogues, real-time feedback	Conversations, debates, character interactions, role-play	Talkpal offers greater mode diversity, while Loora focuses on structured English-speaking scenarios

Customization Mode	Adaptive difficulty and scenario customization (SwitchTools, 2026)	Level-based adaptation (Talkpal, 2025)	Both platforms provide customization, but Loora is more intelligent. It focuses on adjustment based on the learner's demonstrated proficiency, whereas Talkpal adapts based on user-selected language level.
Free Tier	Free trial for a certain period (e.g., 7 days)	Free plan, approximately 10 minutes per day	Talkpal is more accessible for initial users because it provides an ongoing limited free plan
Target Users	English learners, and professionals	Polyglots, diverse language learners, and casual users	The two platforms target different learner segments in the AI language learning market
Strength	Deep English-speaking practice and professional scenarios	Language variety and engaging practice modes	Loora's strength lies in specialized English practice, while Talkpal's strength lies in multilingual variety and interaction diversity
Weakness	Higher cost, English-only focus, limited mode variety	Potential depth limitations and audio quality issues	Loora charges more, only supports English and offers few practice modes. Talkpal lacks in-depth tutoring and has poor audio quality across its multilingual functions. (Loora, 2023; Talkpal, 2025)

Table 1 provides a comprehensive comparison of Loora and Talkpal across eight dimensions. The comparison reveals that these two platforms occupy distinct positions within the AI-assisted language learning market. Loora is more specialized, focusing primarily on developing spoken English skills and professional communication practice; Talkpal, on the other hand, adopts a broader multilingual strategy, supporting over 57 languages and offering a wider variety of interactive practice modes. There are also some similarities between the two platforms. Table 2 summarizes the common strengths and limitations of these two tools.

Table 2

Common Advantages and Limitations of Loora and Talkpal

Advantages	Limitations
Real-time feedback During the dialogue, the system provides vivid, immediate, and granular feedback to language learners by pointing out grammatical, pronunciation, or vocabulary errors in time to help them correct them immediately.	Lack of real interpersonal interaction The AI environment cannot replace the emotional support of human teachers, cultural resonance and non-verbal communication.

• Multimodal interaction Support a variety of input and practice methods such as voice, text, dialogue mode to enrich users' learning experience. • Offer highly personalized and adaptive learning experiences Adjust the content of the dialogue according to the level goals of learners and the dynamics of historical interaction. • Break time and space restrictions Learners can conduct language training anytime and anywhere through mobile phones or computers without being bound by class time and place. • Reduce language learning costs Conv AI tools provide long-term exercises at a lower price than human tutors. • Progress tracking Automatically record the data of the accuracy rate of the course completion of the learning time and show the growth track in the form of visualization. • Exercise with low-pressure Practice repeatedly in an AI environment without judgment and social anxiety to reduce the psychological burden of speaking.	• The restoration of cultural context is limited It is difficult for Loora and Talkpal to completely copy the differences between rational and humorous subtexts and regional culture in real communications. • Payment barrier Access to this high-quality feature often requires extra payment, posing a barrier for price-sensitive users. • Data privacy risk These two platforms will collect a large number of sensitive information in the habitual location of voice recordings. There is a hidden danger of leakage or abuse. • Insufficient continuity of dialogue In the on-site dialogue or cross-painting interaction, apps may forget the content discussed before, which leads to incoherent factors in the theme. • Limited depth For advanced learners or scenarios that requires in-depth writing training, the feedback provided is superficial.
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Comparison Between ConvAI Tools and Human Teachers

Although tools such as Loora and Talkpal have demonstrated quantifiable benefits in terms of spoken practice, learner involvement and alleviating anxiety about speaking a foreign language, their effectiveness compared to human teachers remains to be verified. A systematic review conducted by Ji et al. (2022) examined 24 empirical studies on the application of ConvAI in language education. Their meta-analysis found that ConvAI primarily plays the roles of conversation partner, feedback provider, resource provider and needs analyzer. In contrast, human teachers function as designers, organizers, facilitators and emotional supporters. Consequently, the future development of ConvAI should focus on its role as a supplementary tool to human teachers. We believe such a collaboration is able to enhance teaching efficiency and encourage positive student involvement. Table 3 compares the effectiveness of ConvAI and human teachers across various pedagogical dimensions and proposes research ideas for future human-ConvAI collaborative teaching.

Table 3*Comparative Analysis of ConvAI and Human Teachers*

Dimension	Explanation	ConvAI	Human teacher	Future prospects of Human-ConvAI collaborations
Collaborative problem solving	Collaborative problem solving: encourages children to communicate effectively and fosters creativity and critical thinking (Aslan et al., 2025).	Monitor in real time, identify difficulties with collaboration and provide standardized intervention recommendations.	Focusing on high-value, flexible teaching decisions and emotional support	ConvAI can serve as a complementary tool to human teachers to help students build up collaborative problem-solving skills. It can provide real-time insights into group dynamics, and offer precise recommendations for interventions (Ji et al., 2022).
Emotional connection	Emotional Contagion Theory: People unconsciously mimic others' emotional expressions (Hatfield et al., 1993).	Using animated avatars, synthesized speech and virtual facial expressions to simulate joy. Provide a consistent positive emotional signal regardless of fatigue or mood. Furthermore, it can be programmed to avoid displaying negative expressions such as anger. (Peng et al., 2026)	Express genuine, natural emotions, communicate sincere care and empathy, and adapt their facial expressions in response to the real-time dynamics of the classroom. Teachers' emotional expressions have a direct impact on students' emotional experiences, and positive emotions help to foster a supportive learning environment (Becker et al., 2014).	ConvAI can act as an "emotional mirror" to detect students' emotional states and suggest or display appropriate positive expressions, thereby mitigating the negative effects of teacher burnout. Human teachers, meanwhile, can focus on conveying genuine emotional warmth.

Attention & cognitive engagement	Joyful teachers are more successful in gaining and maintaining students' attention; positive emotions broaden cognitive focus and reduce anxiety (Marici et al., 2025).	It can be programmed to consistently display warm, professional and helpful traits, such as a patient tone and encouraging words (Zia, 2024). However, it lacks depth and consistency in long-term interactions (Yifan et al., 2025)	Through dynamic and engaging behavior such as moving around the classroom, varying their tone of voice and using humor. Through these, teachers can capture students' attention. They are also able to pick up on social cues that AI might overlook.	ConvAI can provide human teachers with real-time attention analysis alert, for example: "student X has been distracted for 20 seconds". Human teachers can then intervene in a targeted manner. Furthermore, in the future, AI may be able to autonomously implement "attention-grabbing" micro-interventions, whilst human teachers can focus on maintaining the teaching rhythm for the whole class (Zhang et al., 2025).
Storytelling	The narrator guides learners into contextualized tasks, facilitating task breakdown and providing immediate feedback (Khosrawi-Rad et al., 2025).	Function as the narrator to guide contextualized tasks and provide immediate prompts and feedback.	Design authentic, interdisciplinary storylines and guide students through role-play and emotional engagement (Kenshinbay et al., 2025).	ConvAI handles execution and feedback, whilst teachers are responsible for design and integration, creating a teaching model based on a pattern of "AI-driven narratives + teacher-led extension" (Ji et al., 2022)

Workload & efficiency	Due to the ever-increasing workload, human teachers suffered from lower level of working efficiency (Aditya et al., 2026).	Answer frequently asked questions, help review learning materials, and record student performance.	Teachers are specialized in handling instructional design, classroom interaction, individual student support and professional development.	ConvAI acts as a “teaching assistant” to teachers, creating a division of labor – “AI handles structured tasks whilst teachers focus on creative teaching”. At the same time, teachers can monitor and optimize the AI’s behavior via a control panel (Aditya et al., 2026).
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In sum, ConvAI primarily plays the following roles in learning: dialogue partner and feedback provider, whilst human teachers are responsible for curriculum design, organizational arrangements and emotional support. Existing studies rarely provide direct comparisons between ConvAI and human teachers under the same instructional conditions. This gives us inspiration to collect data and understand the empirical differences between these two in future research.

Conclusions and Implications

Through the comparative analysis of the two business platforms, Loora and Talkpal, this study evaluates the effectiveness and limitations of ConvAI in language learning and compares the difference between ConvAI tools and human teachers. The results of the study confirm that ConvAI tools provide measurable teaching benefits, which include scalable, immediate and multidimensional feedback, a low-anxiety environment conducive to oral practice, and reduced time and financial burdens of language exposure. These advantages are consistent with the propositions in the four proposed theories that ConvAI is an effective tool for language learning. Meanwhile both platforms carry drawbacks. Loora focuses on oral English teaching only, and some feedback are superficial for advanced learners. Pricing is also a concern for Loora. Talkpal provides a wide range of multilingual support with a lower price but suffered from Potential depth limitations and audio quality issues. More importantly, neither of these platforms can truly replicate the empathy, cultural intermediary or adaptive emotional support provided by human teachers. Our comparison between ConvAI tools and human teachers further reveals five major differences between them. This includes collaborative problem solving, emotional connection, attention and cognitive engagement, storytelling, and workload and efficiency. Our conclusion is that ConvAI may be a good tool in managing repetitive and feedback-intensive tasks, but human teachers still play an irreplaceable role in designing tasks, provide guidance and emotional support to language learners. ConvAI will not substitute human teachers, but researchers and practitioners should consider the way to well-coordinate division of labor between ConvAI and human educators. A collaborative pattern of ConvAI+human is the ideal learning mode for language learners in the future.

The present research carries several targeted implications for pedagogical research, educational practice, commercial application developers, and policy makers. First, in terms of pedagogical research, future work should focus more on the domain of ConvAI-human collaboration instead of ConvAI alone or human educator alone. Moreover, more empirical studies examining the learning effectiveness and learning outcomes should be conducted in this context. More detailed dimensions such as measurement of improvements in skill levels, learning motivation, cultural understanding and knowledge retention should be investigated. Secondly, ConvAI tools for educational practice should be embedded within a blended learning framework as supplementary resources. For example, Loora can be used to provide structured English-speaking practice with precise feedback, whilst Talkpal can be utilised for flexible multilingual exposure. It is recommended that teachers focus on higher-order activities, such as designing communicative tasks, cultural interpretation and emotional scaffolding, whilst utilising AI-generated analytical data to guide differentiated teaching. Third, developers must optimize ConvAI algorithms, making the app more natural and professional, and provide better support for educator's need. They should further prioritize improving the reliability of feedback, improving contextual memory, and implement robust data protection measures to build user trust and drive institutional adoption. Last, policymakers, especially those in the language schools, should ensure that relevant guidelines are given to both teachers and students in terms of the appropriate use of ConvAI in language learning. In addition, greater investment must be made in training both teachers and students in AI literacy to enhance their abilities to critically evaluate and effectively utilize these tools. At the institutional level, when selecting the right ConvAI tools for university-wide adoption, priority should be given to digital platforms that can demonstrate educational effectiveness, especially when collaborating with human teachers. By doing this, institutions can also drive the market's transition from single-function AI tutoring system to ConvAI-human collaborative teaching ecosystem.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

The authors declare that one generative AI tool – ChatGPT was used in drafting the manuscript. The usage was limited to correcting grammatical and spelling errors and rephrasing statements for accuracy and clarity. The authors further declare that, apart from this tool, no other AI or AI-assisted technologies have been used to generate content in writing the manuscript.

References

- Aditya, D., Nagada, U., & Otermans, P. C. J. (2026). Redefining education: Addressing challenges with conversational AI. *Cogent Education*, 13(1). <https://doi.org/10.1080/2331186x.2025.2611649>
- Alieva, N. (2025). Human-AI communication: Sign interpretation challenges and contextual understanding in dialogue. *Journal of Universal Science Research*, 3(4), 165–167.
- Alkishri, W., Yousif, J. H., AI Husaini, Y., & Mahmood, A. (2025). Conversational AI in Education: A general review of Chatbot technologies and challenges. *Journal of Logistics Informatics and Service Science*, 12(3), 264–282.
- Aslan, S., Alyuz, N., Li, B., Durham, L. M., Shi, M., Sharma, S., & Nachman, L. (2025). An early investigation of collaborative problem solving in conversational AI-mediated learning environments. *Computers and Education: Artificial Intelligence*, 8, 100393.
- Becker, E. S., Goetz, T., Morger, V., & Ranellucci, J. (2014). The importance of teachers' emotions and instructional behavior for their students' emotions – An experience sampling analysis. *Teaching and Teacher Education*, 43(43), 15–26. <https://doi.org/10.1016/j.tate.2014.05.002>
- Chigbu, B. I., & Makapela, S. L. (2025). AI in education, sustainability, and the future of work: An integrative review of industry 5.0, education 5.0, and work 5.0. *Journal of Open Innovation: Technology, Market, and Complexity*, 100645.
- Chua, H. W., & Annamalai, N. (2025). A bibliometric analysis and systematic review in AI chatbots in language teaching and learning. *International Journal of Technology in Education*, 8(2), 274–331.
- Dai, L., & Wu, F. (2025). An AI-powered conversational system for college students learning English as a second language. *Education and Information Technologies*. <https://doi.org/10.1007/s10639-025-13640-3>
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. Berlin: Springer Science & Business Media. <https://doi.org/10.1007/978-1-4899-2271-7>
- Du, X. (2009). The affective filter in second language teaching. *Asian Social Science*, 5(8), 162–165.
- Dunham, N. (2026). *TalkPal Review: Is It Worth Subscribing in 2026?* <https://languataalk.com/blog/talkpal-review/>
- Ellis, R. (2022). Task-based language teaching. In *Research Questions in Language Education and Applied Linguistics: A Reference Guide* (pp. 133–136). Springer Nature.

- Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1993). Emotional Contagion. *Current Directions in Psychological Science*, 2(3), 96–100. <https://doi.org/10.1111/1467-8721.ep10770953>
- Ji, H., Han, I., & Ko, Y. (2022). A systematic review of conversational AI in language education: focusing on the collaboration with human teachers. *Journal of Research on Technology in Education*, 55(1), 1–16. <https://doi.org/10.1080/15391523.2022.2142873>
- Julin, J. (2025). *Gamification in Learning: Turning Work into Play*. <https://craft-it4sd.eu/gamification-in-learning-turning-work-into-play/>
- Kenshinbay, T., Ghorbandordinejad, F., Bolatova, A., & Kiyassova, K. (2025). Enhancing language teacher reflection through narrative techniques: character development and critical incident analysis. *Bulletin of Language and Literature Studies*, 2(1). <https://doi.org/10.59652/blls.v2i1.482>
- Khosrawi-Rad, B., Keller, P. F., Benner, D., Grogorick, L., Borchers, A., Janson, A., Leimeister, J. M., & Robra-Bissantz, S. (2025). Promoting students' motivation in language education with gamified pedagogical conversational agents. *Computers & Education*, 238, 105374. <https://doi.org/10.1016/j.compedu.2025.105374>
- Kinging, C. (2001). Sociocultural approaches to teaching and teachers' research. In R. Z. Lavine (Ed.), *Beyond the boundaries: Changing contexts in language learning* (pp. 201–225). McGraw-Hill Higher Education.
- Krashen, S. D. (1986). *Principles and practice in second language acquisition*. Pergamon Press.
- Loora. (2023). *Speak English with Loora AI*. <https://www.loora.com/>
- Lunden, I. (2023). *Loora, a generative AI app that uses an audio interface to help users learn English, raises \$9.25M*. <https://techcrunch.com/2023/06/27/loora-a-generative-ai-app-that-uses-an-audio-interface-to-help-users-learn-english-raises-9-25m/>
- MacIntyre, P. D., Clément, R., Dörnyei, Z., & Noels, K. A. (1998). Conceptualizing willingness to communicate in a L2: A situational model of L2 confidence and affiliation. *The Modern Language Journal*, 82(4), 545–562.
- Mammadzada, C. (2026). *Best AI Language Learning App 2026: Top AI Language Learning Apps Ranked*. <https://www.enverson.com/what-are-the-best-ai-language-learning-apps-2026-edition>
- Maricheva A., & Kyrychenko, R. (2026). *What is ASR: Understanding Automatic Speech Recognition*. <https://softteco.com/blog/what-is-asr>
- Marici, M., Iosim, I., & Marin, C. D. (2025). The role of teachers' emotional facial expressions on student perceptions and engagement for primary school students-an experimental investigation. *Frontiers in Psychology*, 16, 1613073.

- Padmanabhan, I. (2025). *Honest Talkpal Review: Is Talkpal AI Worth it (When ChatGPT is Free)?* <https://ilampadmanabhan.medium.com/honest-talkpal-review-is-talkpal-ai-worth-it-when-chatgpt-is-free-sep-2025-b805fabacfb8>
- Peng, X., Qian, Y., & He, Y. (2026). When AI chatbots understand emotions: exploring the mechanisms of self-disclosure from emotional arousal to psychological acceptance-A hybrid SEM-ANN-NCA analysis across multiple interaction configurations. *Frontiers in Psychology*, 16. <https://doi.org/10.3389/fpsyg.2025.1724313>
- PracticeMe. (2026). *Loora AI review: Honest take on English practice.* <https://practiceme.app/vs/loora>
- Shadiev, R., Kaliyeva, A., Kairatova, A., Yerbulatova, Z., Ryskulbek, A., & Beisembayeva, Z. (2025). Exploring the role of conversational AI in developing communicative skills: A systematic review. *Digital Applied Linguistics*, 4, 103058.
- Stryker C., & Holdsworth, J. (2026). *What is NLP (natural language process)?* <https://www.ibm.com/think/topics/natural-language-processing>
- SwitchTools. (2026). *Loora.* <https://www.switchtools.io/tool/loora>
- Talkpal. (2025). *Talkpal AI Language Learning: Official Website and Pricing Information.* <https://talkpal.ai/>
- Test Prep Insight. (2026). *Talkpal Review Our In-depth Review of TalkPal.* <https://testprepinsight.com/reviews/talkpal-review/>
- Wang, Y. F., Petrina, S., & Feng, F. (2017). VILLAGE—virtual immersive language learning and gaming environment: immersion and presence. *British Journal of Educational Technology*, 48(2), 431–450.
- Weizenbaum, J. (1966). ELIZA-A computer program for the study of natural language communication between man and machine. *Communications of the ACM*, 9(1), 36–45.
- Wu, L., Zheng, Z., Qiu, Z., Wang, H., Gu, H., Shen, T., Qin, C., Zhu, C., Liu, Q., Xiong, H., & Chen, E. (2024). A survey on large language models for recommendation. *World Wide Web*, 27(5), 60.
- Xing, C., & Saeed, M. A. (2025). A Systematic review on artificial intelligence (AI) technologies in ESL/EFL speaking skills. *International Journal of TESOL Studies*, 8(2), 240–270.
- Yifan, L., Kangping, X., Yanzhen, L., Yang, Y., & Andrew, Y. (2025). *NeurIPS Probing the Lack of Stable Internal Beliefs in LLMs.* <https://neurips.cc/virtual/2025/loc/mexico-city/129953>
- Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education. *International Journal of Educational Technology in Higher Education*, 16(1), 1–27.

- Zhang, H., Su, Y., Xu, X., Lei, V. N.-L., & Hao, S. (2025). Beyond theory: A mixed-methods exploration of postgraduate engagement with ChatGPT for English speaking proficiency. *International Journal of Technology in Education*, 8(4), 1022–1047. <https://doi.org/10.46328/ijte.1221>
- Zhang, J., Beckmann, N., & F. Beckmann, J. (2018). To talk or not to talk: A review of situational antecedents of willingness to communicate in the second language classroom. *System*, 72, 226–239.
- Zia, K. (2024). Chatbots as conversational partners: their effectiveness in facilitating language acquisition and reducing foreign language anxiety. *Journal of Applied Linguistics and TESOL (JALT)*, 7(4), 238–255. <https://jalt.com.pk/index.php/jalt/article/view/38>

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