

Exploring the Use of Character.AI in Enhancing ESL Learners' Affective Dimensions

Ereena Elieya Azrin Irzal¹, Nor Nadia Raslee^{2*}

¹Akademi Pengajian Bahasa, UiTM Shah Alam,

²Astro Malaysia Sdn. Bhd.

*Corresponding Author

DOI: <https://doi.org/10.47772/IJRISS.2026.100801015>

Received: 10 September 2026; Accepted: 15 September 2026; Published: 23 September 2026

ABSTRACT

ESL learners face challenges in their language learning journey, and such challenges are often caused by communication anxiety, low self-confidence and high-stress conditions. As a result, digital natives like Generation Z ESL learners are increasingly adopting generative AI tools like Character.AI to practise communication in the third spaces. This qualitative study was guided by Krashen's Affective Filter Hypothesis and it explores ESL learners' perceptions of Character.AI as a tool to develop English-speaking skills. Ten non-native ESL speakers were interviewed, and the results were thematically analysed. While participants aimed to develop their speaking fluency, the main mode of interaction via the text-based interface of the platform reveals a pedagogical paradox. Character.AI. Besides lowering learners' affective filters, AI text-based chatbots specifically helped to reduce anxiety among learners, increase their motivation, increase WTC and improve their vocabulary and sentence structure. The findings suggest that Character.AI is a valuable text-based chatbot and a useful preparatory stepping stone for practice and to lower affective filters.

Keywords: (Character.AI, text-based chatbot, ESL, English-speaking skills, Affective Filter Hypothesis)

INTRODUCTION

English serves as a crucial global lingua franca, playing an essential role in international communication across business, education, diplomacy, and technology sectors (Sharma, 2022; Bhandari & Ghimire, 2025). Despite its importance, acquiring speaking fluency remains a significant challenge for many learners, particularly those who lack real-time interaction opportunities or struggle with self-confidence (Alghanmi, 2025; Sweet et al., 2025). Over time, language pedagogy has shifted from classical approaches like the Grammar-Translation Method (Shah et al., 2025) to Communicative Language Teaching (Salmanova, 2025) and, more recently, to mobile applications and Computer-Assisted Language Learning (CALL) (Bahari et al., 2025).

However, the setting of traditional classrooms and the application of digital tools often fail to provide the appropriate low-stress environment needed for learners to effectively overcome their speaking anxiety and build communication confidence (Alghanmi, 2025; Sweet et al., 2025). Advancements in Artificial Intelligence (AI) and Natural Language Processing (NLP) have transformed language learning by introducing conversational agents that mimic human speech, offering learners a judgement-free environment to practise speaking in isolation (Gutiérrez, 2023). This is particularly appealing to Generation Z students, who are digital natives deeply engaged in virtual environments and who strongly prefer autonomous, customised, and emotionally engaging learning experiences (Demir & Sönmez, 2021; Chardonens, 2025). Platforms like Character.AI, which facilitate open-ended, text-based, and voice-based role-playing with virtual characters, have emerged as informal online spaces where ESL learners can practise English without the fear of judgement or the stress of performance expectations typically found in formal education (Maher & King, 2023; Wiboolyasarini et al., 2025).

Several empirical studies have explored the integration of AI in formal classroom settings and automated testing. However, research on informal, open-ended platforms like Character.AI remains underexplored, particularly

regarding its impact on students with communication difficulties (Rusmiyanto et al., 2023; Chan & Hu, 2023). The research gap also reveals a lack in the body of knowledge on how students perceive applications like Character.AI in facilitating their English acquisition.

LITERATURE REVIEW

Empirical research highlighted the positive effects of AI chatbots in the affective and linguistic aspects of language learning. For example, studies by Napitupulu and Dalimunte (2025) revealed the use of Character by Indonesian EFL students, where a decrease in anxiety levels and improvements in vocal fluency, word choice and sentence formation were reported among the children who used AI chatbots. Likewise, Tai and Chen (2024) found that primary school students using generative AI chatbots exhibited noticeable improvements in their fluency and reduced anxieties. Zaim et al. (2025) further emphasised that AI chatbots are an effective way to enhance learner autonomy, as they offer timely responses and individualised feedback. The use of generative AI chatbots also helps in regard to writing skills. Fadhila and Kembaren (2025) illustrated that it is possible to do so using Character.AI where students learn new sentence structures and improve their grasp on grammar by using AI chatbots, thus boosting their confidence.

Nevertheless, while these studies reported the positive impacts of generative AI chatbots in English acquisition and mastery, there were also limitations of AI tools in the scope of English language acquisition. For instance, generative AI tools were reported to experience speech recognition errors, occasional rigidity in feedback, lack of real-time grammar correction, and a deficiency in human-level conversational subtlety (Napitupulu & Dalimunte, 2025; Fadhila & Kembaren, 2025). Despite the growing body of literature on AI-assisted language learning, a research gap remains regarding the informal use of the technology as a learning tool. Most existing research has predominantly focused mostly on formal classroom contexts, automated testing systems, or general AI chatbots (Napitupulu & Dalimunte, 2025; Fadhila & Kembaren, 2025; Zaim et al., 2025). Comparatively, the utilisation of informal, open-ended, and character-based platforms operated outside of structured educational environments like Character.AI remains underexplored. There is also limited empirical research investigating the perceptions of ESL learners who struggle with communication difficulties and how they autonomously utilise these affect-focused platforms to develop their English-speaking skills.

THEORETICAL FRAMEWORK

Stephen Krashen developed the Affective Filter Hypothesis in 1982, which highlighted the influence of affective dimensions in learning a new language. Based on this hypothesis, the emotional state of mind of the learner in the sense of motivation, self-confidence, and anxiety can promote or block language learning. The underlying principle is that these affective variables serve as an 'affective filter', a metaphorical and mental barrier that regulates the quantity of comprehensible input that is actually processed by the brain for language acquisition (Krashen, 1982). In contrast to models for only cognitive or pedagogical factors, Krashen's account places greater emphasis on the learner's internal world of affect in determining the success of language learning. Krashen (1982) argued that regardless of how meaningful and appropriate the input to the learner is, acquisition will be unsuccessful if the learner's affective state is not receptive to learning.

Krashen's Affective Filter Hypothesis (1982) offers an appropriate theoretical perspective to explore the extent of affective factors on second language acquisition. In this study, the theoretical investigative perception helps shed light on exploring ESL students' affective perceptions of using Character.AI in their English acquisition. With regards to their level of confidence, willingness to communicate, motivation, and anxiety.

The hypothesis puts forward three primary emotional variables that determine the degree of the affective filter: motivation, self-confidence, and anxiety (Krashen, 1982). Motivation refers to the learner's desire and willingness to pursue language learning activities, and learners who are highly motivated are more inclined to practise regularly. Self-confidence is the belief of being able to make use of the language successfully, which is most likely to lead to higher participation and risk-taking in communication. Anxiety, particularly speaking anxiety, can make learners feel apprehensive and fear committing errors so that they will not communicate. When anxiety increases, the affective filter also increases, so it becomes extremely difficult for the learner to accept and store new language input (Chen, 2020). The three variables interact with each other and have an

influence on the emotional climate within which language learning occurs. Hence, this study explores the use of AI chatbots in English acquisition and how their affective filters (confidence, willingness to communicate, motivation, and anxiety levels) are impacted.

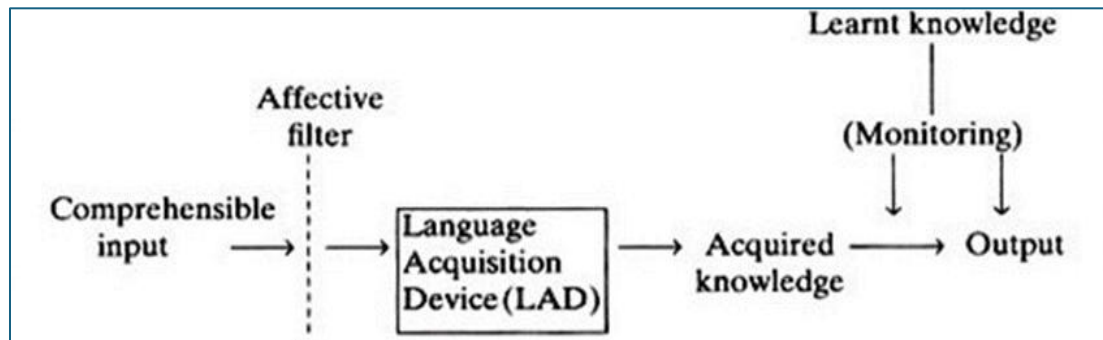


Figure 1. The Affective Filter Hypothesis (Krashen, 1982)

METHODOLOGY

A qualitative research design was used to investigate the experiences and views of ESL learners regarding the usage of Character.AI in their English language acquisition. Participants were selected from popular online channels among users of Character.AI, such as Instagram and the Character.AI Discord server. This method of purposive sampling ensures a set of participants that can provide rich data and insights on the research (Patton, 2002). Purposive sampling was employed, where ten participants were selected based on inclusion criteria that aligned with the aims of the research. The criteria were as followed:

1. participant is a member of Generation Z, defined as one born between 1997 and 2012.
2. having used or currently using Character.AI for English language learning purposes; and
3. having low self-perceived English competence.

The Character.AI application is a user-friendly multi-platform or cross-platform application. The application is accessed using smartphones and the list of characters includes fictional characters, celebrities, and user-created characters, allowing users to choose their preferred conversational partners based on their personal interests. Then, once they have finalised their character, they may choose to interact with their characters via text or via voice. The chat interface allows participants to engage in text-based English conversations with the characters of their choice. Conversely, participants may interact verbally with the characters using the voice-based interface.

Data Collection

The ten participants were interviewed based on the semi-structured interview protocol which was designed to meet the research objectives and research questions. Semi-structured interviews are suitable to gather richer, thick descriptions of qualitative data, as they allow for flexibility and follow-up questions and even follow-up sessions, if necessary (DeJonckheere & Vaughn, 2019).

This interview protocol was divided into four different sections. Section A focused on gathering demographic information, such as age, education level, number of years learning English, English proficiency levels, and interaction types with Character.AI. Section B addressed the first research question regarding the users' perceptions of the benefits of Character.AI. This section aimed to identify the motivation for the use of the platform, the frequency of use, the overall experience, its impact on the affective aspects (confidence, willingness to communicate, motivation, and anxiety), and the linguistic aspects (fluency, vocabulary, and sentence formation) of the learners. Section C addressed the second research question and investigated the perceived limitations of using Character.AI, including challenges in using the tool, authenticity in interactions, reliance on the platform, and appropriateness for English language learning. Section D, served as a general reflection for the participants to recommend the tool and suggest areas for improvement. This semi-structured interview approach

enabled data collection to be comprehensive and nuanced, aligned with the goals of the study, which included the participants' authentic narratives while still accommodating researcher-driven exploration (Naz et al., 2022).

FINDINGS

The semi-structured interviews yielded deep insights into how Generation Z ESL learners used Character.AI in relation to their affective dimensions of language learning. However, before discussing the specific thematic categories, a key behavioural paradox should be highlighted. Although the study was designed to investigate the development of English language skills, the thematic analysis showed that most participants preferred the text-based interface to voice-based interaction. Thus, this modality split provides an interesting view on the digital natives' psyche, where instead of practising speech aloud, most of these learners systematically adapted their oral communication goals into text-based dialogue. They treated the text chat as a low-stress, real-time simulator for conversational speech. As a result, they improved in confidence, motivation, and anxiety reduction, but primarily mediated through written text. This is an insight on how chatbots such as Character.AI serves as a psychological stepping stone before participants feel ready to engage in real-world spoken communication.

This study involved four female, and six male Generation Z participants who came from different fields of study. All participants were undergraduates at either diploma or bachelor's degree level and spoke English as their second language. The majority of participants had prior experience using Character.AI through the text-based interface, while some preferred the voice-based interface.

The interviews were transcribed and thematically analysed. Table 1 provides an overview of the main themes from the thematic analysis of the semi-structured interview. The main themes were established through a systematic coding process in which recurring patterns in the participants' responses were identified, refined, and structured around the research questions guiding this study.

The thematic analysis results revealed perceived benefits and limitations of using Character.AI in English communication. In brief, the identified benefits included reduced anxiety, improved confidence and willingness to communicate, increased motivation, and development in vocabulary and sentence structure. Conversely, the reported limitations were associated with the tool's limited capability to develop speaking fluency, largely due to its lack of corrective feedback, natural responses, and contextual accuracy.

Table 1. Overview of the main themes from thematic analysis

Theme	Codes	Descriptions
1. Reduced anxiety	Low-pressure, Reduced anxiety, Judgement-free	Participants found Character.AI a safe space for practicing English without fear of judgment.
2. Increased confidence and willingness to communicate	Confidence, Willingness to communicate	Participants felt more confident in speaking English after practicing with Character AI.
3. Enhanced motivation	Motivation, Enjoyment, Engagement	Character.AI encouraged participants to practice English through engaging interactions.
4. Perceived improvement in vocabulary and sentence structure	Sentence structure, Vocabulary exposure	Participants learned new vocabulary and sentence structure from repetitive exposure to AI-generated conversation.
5. Limited impact on spoken fluency	Fluency limitation, Practice-oriented use	Participants found Character.AI helpful in practicing English but found it did not improve their fluency in speaking English.
6. Limitations in feedback and contextual accuracy	Lack of feedback, Repetitive responses, Limited realism	Participants found Character.AI lacking in feedback, realism, and depth in AI conversation.

Perceived Benefits of Using Character.AI to Enhance English Communication (RQ1)

Theme 1: Reduced Anxiety

Participants perceive Character.AI as a low-pressure, non-judgemental place to practise English communication. This theme is related to perceptions of emotional comfort, reduced levels of anxiety, and increased levels of willingness to participate in English communication. P5 described Character.AI as a place where she was able to practise her English without judgement:

"You can actually learn it naturally without anyone watching... there's no one there to judge you."

"It feels like I'm talking to a real person and having a real conversation."

Likewise, P7 concurred that Character.AI provides a judgement-free environment and the reduction of nervousness while speaking English:

"I can practise without worrying about me being judged for making those mistakes."

"Practising regularly with Character.AI helps me feel less nervous when I speak English."

P10 emphasised the comfort and emotional safety provided by Character.AI, which helped to reduce the fear of making mistakes:

"To practise my English in a comfortable environment without feeling afraid of making mistakes."

"It reduced my anxiety when communicating in English."

These indicate that Character.AI offers a judgement-free environment that can help alleviate affective barriers, primarily anxiety.

Theme 2: Increased Confidence and Willingness to Communicate

Participants reported an increase in their confidence and willingness to engage in English communication since the repeated interaction with Character.AI enhanced their preparedness and confidence when using English, particularly before interacting with others. P6 stated:

"It does help me a lot in terms of building up my confidence to speak English with other people."

Similarly, P5 illustrated the positive role of the platform in overcoming hesitation and encouraging active participation in English communication:

"It boosts my confidence because I can practise again and again."

"After practising with Character.AI, I feel more confident to speak with other people."

This suggests that the participant's confidence in communicating in English developed gradually through repeated interaction with the platform. P1 explicitly positioned Character.AI as a starting point for learners experiencing anxiety:

"If you feel anxious or you don't have enough confidence to speak English in front of people, start with Character.AI."

These indicated that Character.AI functioned as a preparatory platform that enabled learners to build self-confidence prior to engaging in real-world communication. The increased willingness to communicate further demonstrated the platform's role in reducing affective barriers associated with English speaking.

Theme 3: Enhanced Motivation

The data revealed that the use of Character.AI enhanced motivation and engagement in English. The participants were more interested and engaged in using the language, especially because it was an interactive and informal platform. P5 explained that her motivation to use English increased through interaction with the tool, even though her original intention was entertainment:

"I wasn't there to learn, but I ended up learning a lot of things."

"It made me want to keep talking and continue using English."

Similarly, P7 described how Character.AI positively influenced his motivation to improve his English communication skills because of its enjoyable nature:

"They actually motivate me to keep learning."

"It's not boring, so I don't feel forced to practise."

However, Character.AI did not appear to significantly influence P4's motivation. He stated that he was already confident in speaking English prior to using the platform:

"It didn't really affect my motivation because I was already confident in speaking English."

Overall, the findings suggested that Character.AI contributed to increased motivation to use English by making language practice enjoyable, informal, and engaging. This heightened motivation facilitated greater exposure to English input, which was perceived as beneficial to the participants' learning experience.

Theme 4: Perceived Improvement in Vocabulary and Sentence Structure

Another theme that was identified was the improvements participants saw in their vocabulary and sentence structure with the use of Character.AI. The feedback from participants showed that they had gained knowledge of new words and sentences after multiple exposures due to using the tool in their interactions. P3 stated:

"If you're more interested in developing confidence to boost your vocabulary, then Character.AI is very strong in that regard."

Similarly, P1 also pointed out that using Character.AI tool was beneficial for acquiring of new vocabulary and sentence construction, and subsequently expression of ideas.

"Studied words/phrases from the character's replies."

"It was a bit helpful in understanding the structure of sentences in a conversation."

P7 learnt more on sentence construction and the use of vocabulary following regular and extended interactions with their characters:

"It can communicate in English and can assist you to develop better sentence structure."

However, for more advanced English learner, Character.AI's impact on vocabulary and sentence structure is minimal. P4 stated:

"I don't think it really improved my vocabulary or sentence structure because I was already comfortable using English."

Overall, Character.AI is a tool that is beneficial in increasing learners' knowledge of vocabulary usage and sentence structure, mainly due to repeated exposure to language produced by the tool. The learners have been

able to observe new words, phrases, and sentences as they interact with Character.AI, helping them become more aware of how different ideas can be expressed in English.

Perceived Limitations Using Character.AI to Improve English Communication Skills (RQ2)

Theme 5: Limited Impact on Spoken Fluency

The participants were aware of the practice and preparation value of Character AI, but they were unsure about its contribution towards natural spoken fluency in actual communication contexts. P4, P9, and P6 provided their feedback regarding this. P4 felt that Character.AI does not contribute to his spoken fluency, particularly because it lacked the actual pressure and unpredictability of natural conversations:

"I don't think it really improves fluency because it's not like real-life conversation."

P9 also recognised the importance of the tool in the practice of his speech, but was not certain of the tool's ability to facilitate natural fluency in spontaneous speech production:

"It helps for practice, but when it comes to real conversations, it's still very different."

"You still have to think on the spot in real life."

P6 also stated his reservations about the contribution of Character.AI towards the development of natural spoken fluency, as the conversations were controlled and lacked the natural aspect of human interaction:

"It's not really the same as talking to a real person."

While these statements reinforce the argument that Character.AI has minimal impact on spontaneous fluency, there are participants who felt they experienced some degree of improvement in fluency as a result of continuous interaction with Character AI. P5 and P7 mentioned:

P5: *"Because the conversation is continuous, I feel like my fluency improved a bit."*

P7: *"Practicing again and again helps me speak more smoothly."*

Theme 6: Limitations in Feedback and Contextual Accuracy

Although Character.AI has its advantages, participants did report some limitations. Character.AI was reported to provide limited feedback, limited realism, and lack of contextual accuracy. They raised concerns regarding the validity of the AI's responses, repetition in interactions, and the lack of corrective feedback. P4 mentioned that some of the AI's responses appeared artificial and lacked the depth of real human interaction:

"Sometimes you can tell that the response is AI-generated."

"It doesn't always feel natural like talking to a real person."

P9 reported that the repetition of the AI's responses and the lack of contextual development in conversations:

"Sometimes the answers are repetitive."

"After a while, the conversation feels the same."

Meanwhile, P10 expressed concerns regarding the lack of feedback, especially in relation to language accuracy.

"I wish that it could tell me whether my English is correct or not."

"It doesn't really correct my grammar or pronunciation."

These statements further emphasised the importance of feedback in improving language use. others participants reported similar limitations:

P1: *"It doesn't really correct my mistakes."*

P5: *"Sometimes the replies are not very accurate."*

P6: *"The answers can be a bit repetitive."*

P8: *"It feels different from talking to a real person."*

P7: *"It would be better if it could give feedback on mistakes."*

The findings revealed that although participants were able to practise using Character.AI, the tool was perceived as limited in providing accurate feedback, realistic communication, and contextually appropriate responses.

DISCUSSION

This research yields one insight, which was the divergence between participants' affective filters and their perceived English proficiency. The aim of this study was to investigate their progression in learning English-speaking skills. However, the data indicated that most of the participants interacted mainly with Character.AI through its text-based interface and not voice features. This creates a pedagogical paradox because language acquisition transferred from oral production to text-based reading and writing.

The findings are in line with previous research on conversational AI and AI-based language learning. The anxiety reduction and confidence gained were similar to those reported by Gutiérrez (2023) and Napitupulu and Dalimunte (2025). Both studies concluded that AI in language learning created opportunities for learners to engage in risk-taking and practice without judgement, and that this helped learners who felt anxious about or lacked confidence in learning English.

Theoretically, the findings corroborated Krashen's Affective Filter Hypothesis, which states that the acquisition of a second or additional language is enhanced when the learner's affective filters are lowered, affective stress is reduced, and affective states are positive. The decrease in anxiety and increase in willingness to communicate suggested that Character.AI facilitated the condition that reduced learners' affective filters. Additionally, this facilitates participants' engagement with the English language.

The vocabulary and syntactic improvements observed were also in line with previous research showing the relevance of repeated exposure to conversational AI in language learning, as mentioned in Escalante et al. (2023). However, due to the absence of adequate correction feedback and explicit teaching, the learners' opportunities for further improvement of their language skills were restricted, highlighting the concerns of pedagogy pointed out by Chan and Hu (2023). The results regarding fluency in speech and realism of communication were also consistent with previous literature. As mentioned by Ramana et al. (2024), there are potential risks associated with relying too heavily on AI tools, meaning that this reliance includes using tools like Character.AI. If used unchecked, the use of AI chatbots can lead to superficial engagement and limit substantive communication growth.

RECOMMENDATIONS AND CONCLUSION

It is recommended that future studies in a similar field and context integrate a bigger sampling size beyond the ten undergraduate participants. A bigger sampling size will ensure generalisability to broader, more diverse populations. Next, future studies may recruit participants who have not had exposure to the tool. At present, as this study explores the topic, a selection bias exists since the participants consist of digital natives who were previously users of digital tools. Finally, the study was constrained by a modality imbalance. The participants naturally gravitated toward text-based messaging over voice interaction, thus, researchers should explicitly isolate and evaluate the application's voice-based features to assess the impact on real-time pronunciation, intonation, and auditory processing skills.

This study concludes that Character.AI serves as a powerful auxiliary tool for Generation Z ESL learners, specifically in engaging the affective dimensions of second language acquisition. Grounded in Krashen's Affective Filter Hypothesis, the findings demonstrate that the use of such a tool establishes a low-stress, judgement-free environment that lowers emotional barriers and communication anxiety and boosts both self-confidence and autonomous learning. Furthermore, repeated exposure to the AI's outputs yields noticeable linguistic gains in vocabulary retention and syntactic awareness. While a lowered affective filter may not determine language mastery, especially oral fluency, chatbots such as Character.AI remains as a vital preparatory stepping stone for ESL learners. Future studies in a similar field and context are recommended to include a larger sample size to increase generalisability. Future studies may also include sampling who have not had any exposure to AI chatbots. Lastly, as there was a modality imbalance in the study due to the participants' preference to use the text-based feature rather than the voice feature, researchers may conduct future studies that test the voice feature of the application to see whether it affects the real-time pronunciation, intonation and auditory processing ability.

In conclusion, AI text-based chatbots like Character.AI has been found to be an effective support tool when it comes to second language acquisition and the affective domain for ESL learners. The results show that such a tool can create a low-stress and non-judgemental atmosphere that helps in reducing psychological barriers and communication anxiety while increasing self-confidence and independent learning. Additionally, the AI chatbot's outputs lead to evident improvements in language proficiency, such as better vocabulary retention and an understanding of syntax, through repeated use. Even though a lowered affective filter may not indicate complete language mastery, Character.AI serves to be an effective preparatory stepping stone for ESL students.

REFERENCES

1. Alghanmi, A. (2025). Challenges in acquiring speaking fluency among autonomous ESL learners. *Journal of Language Teaching and Research*, 16(1), 89–98.
2. Ali, Z., Azam, R., & Shah, S. G. M. (2025). Investigating the readiness of English language teachers' instructional practices, teaching approaches and technology integration in Karachi, Pakistan. *Journal of Political Stability Archive*, 3(2), 332-349. <https://doi.org/10.63468/jpsa.3.2.19>
3. Bahari, A., et al. (2025). Computer-Assisted Language Learning (CALL) and mobile applications: A systematic review of recent pedagogical shifts. *Educational Technology Research and Development*, 73(1), 301–325.
4. Bhandari, S. R., & Ghimire, S. (2025). Expanding horizon of English language as a lingua franca. *THE ACADEMIA: An Interdisciplinary Research Journal*, 5(1), 170–176.
5. Chan, C. K. Y., & Hu, W. (2023). Students' voices on Generative AI: Perceptions, benefits, and challenges in Higher Education. *arXiv*. <https://doi.org/10.48550/arxiv.2305.00290>
6. Chardonens, S. (2025). Adapting educational practices for Generation Z: Integrating metacognitive strategies and Artificial Intelligence. *Frontiers in Education*, 10. <https://doi.org/10.3389/feduc.2025.1504726>
7. Chen, Y. (2020). The interaction of affective variables in second language acquisition: A modern review of the Affective Filter Hypothesis. *Foreign Language Annals*, 53(3), 412–428.
8. DeJonckheere, M., & Vaughn, L. M. (2019). Semi-structured interviewing in primary care research: a balance of relationship and rigour. *Family Medicine and Community Health*, 7(2), e000057. <https://doi.org/10.1136/fmch-2018-000057>
9. Demir, B., & Sönmez, G. (2021). Generation Z students' expectations from English language instruction. *Dil ve Dilbilimi Çalışmaları Dergisi*, 17(1), 683-701. <https://doi.org/10.17263/jils.903536>
10. Escalante, J., Garcia, M., & Torres, P. (2023). The impact of conversational AI agents on vocabulary acquisition and syntactic awareness in second language learning. *Computer Assisted Language Learning*, 36(8), 1102–1124.
11. Fadhila, F., & Kembaren, F. R. W. B. (2025). EFL students' perception of Character.AI as a tool to improve their writing skills: A qualitative study. *Nusantara: Jurnal Pendidikan Indonesia*, 5(2), 305–313. <https://doi.org/10.62491/njpi.2025.v5i2-4>
12. Gutiérrez, K. (2023). Conversational agents and natural language processing in low-stress language practice environments. *AI in Education Journal*, 14(2), 89–104.

13. Krashen, S. (1982). Principles and practice in second language acquisition. *Pergamon Press*.
14. Maher, D., & King, M. (2023). Role-playing with virtual characters: Exploring Character.AI as an informal online space for language acquisition. *Journal of Educational Technology*, 41(4), 215–230.
15. Napitupulu, M. F., & Dalimunte, A. A. (2025). A study of students' perception of Character.AI in practicing English speaking fluency. *CELTIC: Computer-Enhanced Language Teaching and Learning*, 12(1), 384–404. <https://doi.org/10.22219/celtic.v12i1.40721>
16. Naz, N., Gulab, F., & Aslam, N. (2022). Development of qualitative semi-structured interview guide for case study research. *Competitive Social Sciences Research Journal*, 3(2), 42–52.
17. Patton, M. Q. (2002). Qualitative research & evaluation methods (3rd ed.). Sage Publications.
18. Ramana, K., Kumar, S., & Rao, M. (2024). Overdependence on generative AI tools in higher education: Implications for deep communicative development. *Computers & Education*, 210, Article 104950.
19. Rusmiyanto, R., Huriati, N., & Sustryny, D. (2023). The role of artificial intelligence (AI) in developing English language learner's communication skills. *Journal on Education*, 6(1), 722–733.
20. Salmanova, F. (2025). From classical methods to Communicative Language Teaching (CLT): The evolution of modern language pedagogy. *International Journal of Bilingual Education and Bilingualism*, 28(2), 142–155.
21. Shah, M., Khan, A., & Lodhi, S. (2025). Deconstructing the Grammar-Translation Method: Historical shifts in contemporary ESL classrooms. *Language, Culture and Curriculum*, 38(1), 67–83.
22. Sharma, R. (2022). English as a crucial global lingua franca in business, education, and technology sectors. *Global Communication Studies*, 18(2), 45–58.
23. Sweet, L., Miller, K., & Davis, R. (2025). Overcoming speaking anxiety through low-stress digital environments: A study on autonomous ESL learners. *System*, 128, Article 103412. <https://doi.org/10.1016/j.system.2025.103412>
24. Tai, Y., & Chen, Y. (2024). Generative AI chatbots in primary education: Enhancing fluency and lowering anxiety in EFL learners. *Interactive Learning Environments*, 32(4), 512–528.
25. Wiboolyasarini, W., et al. (2025). Informal open-ended platforms for autonomous ESL learning: The case of character-based agents. *CALL-EJ*, 26(1), 112–129.
26. Yang, L., & Li, R. (2024). ChatGPT for L2 learning: Current status and implications. *System*, 124, 103351. <https://doi.org/10.1016/j.system.2024.103351>
27. Zaim, M., Refnaldi, R., & Safitri, D. (2025). Boosting motivation and determination: Personalized feedback loops in AI-based conversational chatbots. *Studies in Second Language Acquisition*, 47(2), 289–304.