

Exploring Students' Perspectives on Using AI in English-Speaking Education with Metaphorical Expressions

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ABSTRACT

This qualitative study explores university students' perceptions of using artificial intelligence (AI) in their English-speaking learning through metaphor analysis. As AI becomes more integrated into language education, understanding how students conceptualize its role offers valuable insights for designing effective AI-assisted learning environments. The research examines 244 metaphorical expressions provided by English as a Foreign Language (EFL) students from various majors at a public university in mainland China. Students completed open-ended survey questions to express their metaphorical representations of AI in their language learning journey. The responses were systematically categorized and analyzed, revealing a variety of positive and negative attitudes. Positive metaphors included concepts such as "enhanced practice opportunities," "language learning facilitator," "future necessity," and "personalized assistance," highlighting AI's potential to support individualized learning, provide meaningful practice, and aid in mastering spoken English. Conversely, negative metaphors like "complexity" and "over-reliance" pointed to concerns about navigating AI tools and the risk of excessive dependence on technology. These metaphorical insights shed light on students' underlying beliefs about AI and its role in developing English-speaking skills. Understanding these perceptions is crucial for educators and curriculum designers to ensure AI tools are integrated in ways that enhance student engagement, improve speaking proficiency, and address potential challenges.

Keywords: AI (Artificial Intelligence), English learning, English speaking, Metaphor analysis

1. INTRODUCTION

With the continuous advancement of computer science, the integration of modern information technology in language learning is on the rise (Ran et al., 2021). Among these technologies, Artificial Intelligence (AI) has emerged as a promising tool in language education, enhancing learners' engagement and achievements (Haristiani, 2019; Knox, 2020; Pikhart, 2020). S. Chen (2021) notes that incorporating AI-assisted learning systems in English education has increased students' interest in learning English. Compared to traditional, often monotonous teaching methods, AI-assisted systems provide expanded resources and a more dynamic learning experience (Bajaj & Sharma, 2018). Divekar et al. (2022) further demonstrated that AI-supported language tools can create immersive and engaging environments that enhance learners' overall language proficiency.

Several studies have investigated the impact of AI-assisted language learning tools on various English language skills. For instance, Wei (2023) explored AI's influence on English learning achievements, L2 motivation, and self-regulated learning among EFL learners in China, reporting a generally positive perception toward AI's role in English education. Hwang & Chen (2023) highlighted that AI chatbots can adapt to students' developmental needs and learning preferences, providing creative, interactive experiences through natural language interactions. Similarly, Hsu et al. (2024) examined AI's role in improving young learners' vocabulary acquisition, finding benefits in terms of learners' self-regulation. Particularly in English-speaking skills, AI chatbots have shown potential as valuable tools.

However, challenges accompany the use of AI in language learning. Fryer et al. (2017) observed that AI's initial novelty can wear off over time, potentially reducing students' motivation to continue learning with these tools. Additionally, Pérez et al. (2020) reviewed AI chatbots in educational settings, suggesting that while they can function in roles similar to human teachers, they may also trigger negative emotional responses in students.

This study aims to explore the root causes of these challenges from the perspective of students who use AI-assisted tools to enhance their English-speaking skills. Although prior research has examined students' perceptions of AI in English learning, few studies focus specifically on English-speaking skills. To address this gap, this study employs metaphor analysis—a method used for decades to explore people's opinions on complex issues (Lim, 2024). Through analyzing metaphors that students use to describe AI in English-speaking practice, this study seeks to clarify abstract perceptions with familiar, concrete imagery (Lakoff & Johnson, 2008). The research questions are:

1. What metaphorical expressions do students use to describe their experiences with AI-assisted English-speaking learning and practice?
2. How can these metaphorical expressions be categorized to reveal students' perspectives on AI-assisted English-speaking learning?

2. LITERATURE REVIEW

2.1 Artificial Intelligence in Language Education

The rapid advancement of artificial intelligence (AI) has significantly influenced various sectors, including education. AI technologies, such as natural language processing (NLP) and machine learning algorithms, have been leveraged to enhance language learning through personalized and adaptive learning environments (Lu, 2018). These AI-driven platforms have shown potential in providing individualized feedback, supporting autonomous learning, and promote interactive learning experiences that traditional teaching methods may not fully offer (Fathi & Rahimi, 2022; Rodinadze & Zarbazoia, 2012).

In language education, AI-based applications like intelligent tutoring systems and language learning chatbots allow learners to engage with language practice beyond the constraints of the classroom. By simulating human-like interactions and providing immediate feedback, AI enables learners to practice skills such as vocabulary, grammar, and pronunciation in a low-risk, supportive environment (Divekar et al., 2022; Kim, 2019). Research indicates that these tools are particularly effective in enhancing English as a Foreign Language (EFL) learners' speaking skills, with AI systems fostering engagement and motivation through immersive practice (C.-H. Chen et al., 2022; Xia et al., 2023).

However, challenges persist in AI's role in language education. While AI can support and motivate learners initially, the novelty effect of AI tools may diminish, potentially impacting long-term motivation (Fryer et al., 2017). Furthermore, AI lacks the emotional and social dimensions of human interaction, which can affect learner engagement, particularly in communicative tasks that benefit from empathy and encouragement (Pérez et al., 2020; Yan et al., 2024). Over-reliance on AI tools also poses concerns, as learners may become dependent on these technologies, potentially undermining self-driven learning skills and critical thinking. These limitations suggest that while AI holds substantial promise in language education, careful consideration is necessary to balance its use with traditional, human-centric learning approaches.

2.2 Metaphor Analysis in Educational Research

Metaphor analysis is a valuable qualitative research method used to explore the underlying beliefs, attitudes, and perceptions of individuals by examining the figurative language they use to describe complex concepts. Metaphors serve as cognitive tools that enable individuals to articulate abstract ideas through familiar, concrete terms, offering insight into their conceptual frameworks (Amin, 2015; Lakoff & Johnson, 2008). In educational research, metaphor analysis has been applied to understand learners' perceptions of various learning experiences, including their attitudes toward educational technologies (Cortazzi & Jin, 2020).

In language learning, metaphor analysis has been particularly useful for revealing learners' perspectives on language acquisition challenges, strategies, and the roles of digital tools. For instance, Yang et al. (2024) explored EFL learners' views on AI-driven language learning, finding that metaphors like "compass" and "crutch" were commonly used, highlighting both the supportive and potentially limiting aspects of AI as perceived by students. Similarly, studies by (Schmitt, 2005) and (Tabata-Sandom et al., 2020) suggest that metaphors such as "bridge" or "tool" often reflect students' perceptions of AI as either a facilitator or a hindrance, depending on their experiences and beliefs about technology integration in education.

Applying metaphor analysis to AI-assisted language learning offers a nuanced understanding of how learners conceptualize AI's role in their educational journey. By analyzing the metaphors students use to describe AI-assisted English-speaking (AI-ES) tools, researchers can uncover both positive and negative perceptions, allowing educators to better address learner needs and concerns. This approach sheds light on the complexities of student attitudes toward AI, revealing the balancing act between appreciation for AI's supportive functions and concerns about its limitations and potential for dependency (Cameron & Maslen, 2010; Schmitt, 2005).

3. RESEARCH METHODOLOGY

3.1 Participants

A total of 300 EFL students at a public university in mainland China were selected as the sample of the present study via convenience sampling method. Data were collected at the end of the second semester of the 2023-2024 academic year in order to discover students' perceptions after using AI to assist their English-speaking learning and practising. 300 questionnaires were distributed with 224 (N=224) finally included in the analysis, excluding those that were not metaphorical or could not be metaphorically analyzed. These participants come from various majors including 100 English major students. The majority of the sample were female students, with 176 (78.6%) female and 48 (21.4%) male students. Participants were chosen from first- and second-year students with ages ranging from 19 to 22 (M=20.5, SD=0.75). Among these 90 (40%) of

them are freshmen and 134 (60%) of them are second-year students. Detailed general information of the participants is shown in Table 1.

		Number of subject (N)	Ratio of subject (%)
Academic Level	First Year	134	60
	Second Year	90	40
Gender	Male	48	21.4
	Female	178	78.6
Faculty	Foreign Language	100	44.6
	liberal art	39	17.4
	Management	45	20.1
	Pre-education	30	13.4
	Physics	10	4.5
Total		224	100

Table 1. General information of Participants

3.2 Instruments

To measure students' perception of AI-assist English-speaking (AI-ES) learning and practising, systematic metaphor analysis introduced by Schmitt (2005) was utilized based on the study of conceptual metaphors theory by Shaw et al. (2021) and metaphor analysis study on the perception of AI education by Lim (2024). Systematic metaphor analysis is a methodological approach that examines the conceptualization of a particular topic through the identification and interpretation of linguistic metaphors. This technique involves dissecting the metaphorical language employed to convey meaning and delving into the underlying cognitive processes that motivate the use of such metaphors.

A questionnaire was used for collecting metaphorical data via online questionnaire platform *Wenjuanxing*. Participants were asked to fill in the blank with metaphor of AI-assisted English-Speaking learning and practising through the sentence "AI-assisted English-Speaking learning and practising is ___, because___." The screenshot of the question of the research instrument is shown in Figure 1.

*4. AI-assisted English-Speaking learning and practising is___

5. Because ____

Figure 1. Questions of the research instrument.

3.3 Data Analysis

Along with the systematic metaphor analysis process of Saban et al., (2006) and Lim (2024), the present study analyses data in the following steps. (1). Naming/labelling raw data. (2). Classification of raw data. (3). Compile and categorize sample metaphor (4). Establish the inter-rater reliability rate, and (5). Analysis data.

First is the naming/labelling step. Linguistic metaphors of AI-ES learning and practising of the participants were numbered from 1 to 224. The metaphorical responses and the reason were coded by MS Excel. If one answer could not be identified as a metaphor, it would be marked as "N/A".

Second is the classification stage. At this stage, the researcher refined the initial data by focusing on similarities and commonalities among metaphors, resulting in 155 metaphors after merging several similar ones.

In the third stage, category names were established to accurately represent each group based on the shared features and characteristics of the metaphors and rationale identified in step 2. This process resulted in a total of six categories: “enhanced practice opportunities,” “language learning facilitator,” “future necessity,” “personalized assistance,” “complexity,” and “over-reliance,” and each was organized within its respective category.

In the fourth stage, the researcher analyses the inter-rater reliability of the final categorization results using SPSS.

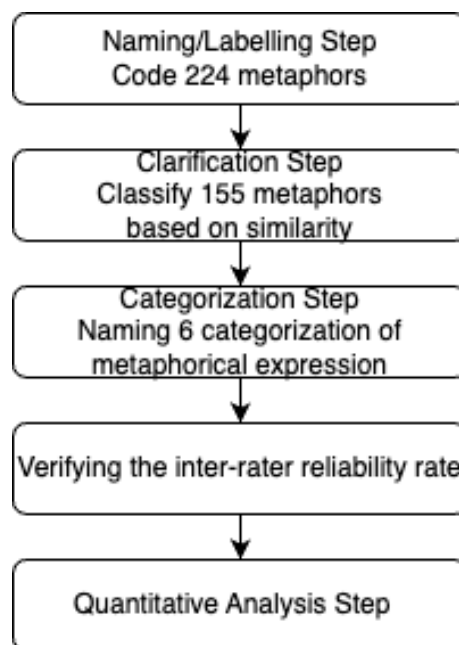


Figure 2. Metaphor Analysis Process

4. RESULTS AND DISCUSSION

4.1 Quantitative Result of Metaphorical Response

To analyze the metaphorical expression regarding AI-assisted English-Speaking (AI-ES) learning and practising, 224 metaphor answers were classified into 155 metaphors based on similarity and then categorized into 6 main groups: “Enhanced practice opportunities”, “Language learning facilitator”, “Future necessity”, “Personalized assistance”, “Complexity” and “Over-reliance”. The categorization procedure considers not only the metaphor answered in question 4 of the questionnaire but also the reasons why participants chose such an expression. Among these different types of metaphors, “Enhanced practice opportunities” account for 26.8% followed by “Language learning facilitator” (25.9%), “Future necessity” (17%), “Personalized assistance” (12.1%), “Complexity” (11.2%) and “Over-reliance” (7%). Table 2 shows the number of different types of metaphors answered by participants. Table 3 demonstrates the distribution of metaphorical responses in each categorization.

Categorization of Metaphors	Numbers of Metaphors	Ratio of Metaphors (%)
Enhanced practice opportunities	60	26.8
Language learning facilitator	58	25.9
Future necessity	38	17
Personalized assistance	27	12.1
Complexity	25	11.2
Over-reliance	16	7

Table 2. Categorization of metaphors

Categorization of Metaphors	Metaphorical response	Ratio (%)
Enhanced practice opportunities	Practice (8), Exercise (7), Rehearsal (7), Simulation (6), Training (6), Lab (5), Routine (5), Drill (4), Repetition (4), Warm-up (3), Workout (2), Workshop (2), Coaching (1)	26.8
Language learning facilitator	Companion (6), Guide (6), Helper (6), Navigator (6), Partner (6), Ally (5), Assistant (5), Mentor (5), Tutor (5), Coach (4), Trainer (4)	25.9
Future necessity	Foundation (4), Compass (3), Guide (3), Light (3), Map (3), Path (3), Blueprint (2), Fuel (2), Key (2), Pillar (2), Tool (2), Anchor (1), Beacon (1), Bridge (1), Cornerstone (1), Engine (1), Ladder (1), Launchpad (1), Resource (1), Torch (1)	17
Personalized assistance	Partner (5), Teacher (3), Assistant (2), Buddy (2), Coach (2), Companion (2), Encourager (2), Guide (2), Aide (1), Advisor (1), Consultant (1), Counselor (1), Helper (1), Supporter (1), Trainer (1)	12.1
Complexity	Maze (5), Challenge (2), Cloud (2), Forest (2), Jungle (2), Riddle (2), Puzzle (2), Web (2), Machine (1), Mountain (1), Labyrinth (1), Obstacle (1), Problem (1), Storm (1)	11.2
Over-reliance	Backup (2), Blanket (2), Crutch (2), Habit (2), Lifeline (2), Wheels (2), Comfort (1), Net (1), Safety (1), Support (1)	7

Table 3. Metaphorical response distribution

4.2 Qualitative Result of Metaphorical Response

4.2.1 Enhanced practice opportunities: AI-ES as a dedicated space for language development

A total of 60 metaphors categorized under “Enhanced Practice Opportunities” reflect students’ conceptualization of AI-ES as a platform for continuous and accessible practice. Students often liken AI-ES to spaces and tools traditionally associated with skill refinement, underscoring its role in facilitating regular and structured language development.

The predominant metaphor of a “language gym” positions AI as an environment where students can engage in targeted practice, similar to a workout that strengthens fluency and confidence in speaking. Expressions like “language gym” and “workout session” (15 responses) emphasize how AI-ES allows students to “train” consistently, illustrating a view of AI as a resource for developing speaking skills through repeated engagement. This metaphor indicates students’ perception of AI-ES as providing

structured practice routines that support language mastery over time.

Metaphors such as “rehearsal space” and “stage” (10 responses) convey a sense of safety and readiness that AI-ES offers, allowing students to experiment and make mistakes without fear of judgment. These representations suggest that students feel free to “rehearse” and refine their speaking abilities in a supportive, low-stakes environment, which they see as crucial for improving their performance.

Similarly, some students describe AI-ES as a “language lab” or “workshop” (7 responses), evoking images of experimentation and skill-building. Here, AI is conceptualized as a flexible, interactive setting where students can “test” language expressions and receive feedback, further highlighting its role as a “practice lab” designed for iterative learning. This metaphor reflects the perceived value of AI as an experimental space that promotes trial, error, and learning through repeated exposure to language tasks.

Several participants also referred to AI-ES as a “drill sergeant” or “drill field” (6 responses), indicating its role in guiding students through rigorous practice. The “drill” metaphor suggests that students view AI-ES as encouraging disciplined and intensive practice, helping them build resilience and familiarity with spoken English through structured repetition. This conceptualization shows appreciation for the continuous support and reinforcement AI-ES provides.

Finally, AI is metaphorized as a “mirror” (5 responses), underscoring its role in reflecting progress and revealing areas for improvement. Students see AI as a tool that “reflects” their linguistic abilities, helping them self-assess and monitor their progress over time. This metaphor highlights AI’s feedback function, which enables students to recognize their growth and adjust their learning strategies accordingly.

In sum, the metaphors in this category suggest that students perceive AI-ES as a comprehensive practice tool, likening it to a gym, rehearsal space, lab, and mirror. These metaphorical expressions reveal a positive view of AI-ES, emphasizing its potential to provide regular, safe, and structured practice opportunities that support ongoing language development and boost students’ confidence in English speaking.

4.2.2 Language learning facilitator: AI-ES as a guiding and supportive resource

A total of 58 metaphors were grouped under the “Language Learning Facilitator” category, reflecting students’ perception of AI-assisted English-speaking (AI-ES) learning as a supportive guide in their language journey. This category captures students’ view of AI-ES as an accessible, responsive assistant that enhances their ability to learn and practice English through personalized feedback, guidance, and encouragement.

Many students liken AI-ES to a “language coach” or “tutor” (15 responses), suggesting that they see AI-ES as fulfilling the role of an attentive mentor. These metaphors portray AI-ES as a source of guidance, providing tailored advice and feedback that helps students improve their speaking skills. Just as a coach or tutor supports learning by addressing individual weaknesses, students appreciate AI’s ability to offer consistent, constructive responses that support their personal growth in English.

Metaphors such as “speaking buddy” and “practice partner” (12 responses) emphasize the collaborative nature of AI-ES. By conceptualizing AI as a “partner” in their learning process, students imply that AI-ES serves as a companion, making language practice feel less solitary and more interactive. This metaphor reveals how students

value AI-ES not only for its technical capabilities but also for creating a sense of partnership in their language learning journey.

A subset of students referred to AI-ES as a “guide” or “navigator” (10 responses), indicating that they see AI as helping them navigate the complexities of English language learning. These metaphors suggest that students view AI as an experienced entity that can direct them through language challenges, offering prompts, corrections, and resources that aid them in achieving their language goals. This perspective highlights AI’s ability to simplify language learning, making it a manageable and goal-oriented process.

Some participants used the metaphor of a “compass” or “roadmap” (8 responses), illustrating their perception of AI as a tool that provides direction and structure in their learning. By likening AI-ES to navigational aids, students suggest that AI helps keep them on track, providing clarity on what to focus on and how to progress. This metaphor reflects the importance students place on AI’s role in organizing their language learning efforts, ensuring they stay aligned with their objectives.

Additionally, AI-ES is described as a “mentor” or “assistant” (8 responses), indicating that students see AI as a supportive figure who facilitates learning without overtaking it. This distinction highlights students’ appreciation of AI-ES as a helpful presence that supplements their learning efforts while allowing them to retain agency over their progress. They value AI’s input as an aid to their self-driven journey, rather than as a replacement for personal effort and initiative.

In summary, the metaphors in this category demonstrate that students perceive AI-ES as a facilitative partner in language learning. Through the lens of roles like “coach,” “buddy,” “guide,” and “compass,” students express a positive view of AI-ES as an accessible and supportive resource that helps them navigate the language learning process with confidence and clarity. This characterization of AI-ES underscores its utility in providing personalized assistance, fostering a sense of partnership, and guiding students toward greater proficiency in English.

4.2.3 Future necessity: AI-ES as an indispensable tool for language learning

The “Future Necessity” category includes 38 unique metaphors, representing students’ perception of AI-assisted English-speaking (AI-ES) as an essential component of future language education. This category highlights how students view AI as more than a temporary aid—rather, they see it as a foundational resource that will be integral to language learning as technology continues to advance.

Metaphors such as “Foundation” (4 responses), “Pillar” (2 responses), and “Cornerstone” (1 response) underscore AI-ES’s anticipated role as a bedrock of language learning. By choosing these terms, students convey that AI will provide a stable and lasting base on which language education will increasingly depend. This perspective suggests that AI is seen not only as helpful but as a core element in building language proficiency for the future.

The metaphors “Compass,” “Guide,” “Map,” and “Path” (3 responses each) emphasize AI’s role in guiding students through their language-learning journeys. These metaphors indicate that students see AI-ES as a navigational tool that helps chart the course toward fluency. This conceptualization reveals students’ belief that AI will not only support but also direct their learning process, providing clear steps and paths to achieve language mastery.

Students also chose metaphors like “Light,” “Torch,” and “Beacon” (5 responses

combined) to illustrate AI's role in illuminating the path to language learning success. These metaphors suggest that AI will serve as a beacon, shedding light on complex areas and leading students forward in their language acquisition. This reflects a view of AI as an essential resource for overcoming obstacles and enhancing understanding in English learning.

Other metaphors such as "Blueprint" and "Key" (2 responses each) depict AI as a strategic and unlocking resource for future learning. Just as a blueprint lays out a clear plan and a key unlocks potential; students see AI as a tool that provides structure and opens doors to new language possibilities. These metaphors imply that AI is viewed as an indispensable element that will shape the structure and direction of language education.

Finally, terms like "Engine," "Fuel," and "Launchpad" (4 responses combined) convey the idea that AI-ES will act as a driving force in language education. These metaphors highlight students' expectations that AI will energize their learning, propelling them forward and accelerating their progress in English proficiency. Such perceptions underscore the role of AI as not only necessary but as a catalyst for future language success.

In summary, students perceive AI-ES not merely as a useful tool but as a "future necessity" that will anchor, guide, and energize language learning. The metaphors of "Foundation," "Compass," "Light," and "Engine" reflect a forward-looking view that AI-ES will become indispensable, providing continuous support, direction, and momentum in language education. This category underscores students' anticipation of AI's lasting impact on their educational journeys.

4.2.4 Personalized assistance: AI-ES as a dedicated partner in language learning

The "Personalized Assistance" category comprises 27 unique metaphors, reflecting students' view of AI-assisted English-speaking (AI-ES) as a personal, supportive, and individualized learning resource. In this category, students emphasize the tailored support that AI provides, enhancing their learning experience in ways that feel customized and responsive to their unique needs.

Metaphors such as "Partner" (5 responses), "Buddy" (2 responses), and "Companion" (2 responses) suggest that students view AI as a close, reliable partner in their language-learning journey. These terms convey a sense of companionship, indicating that students see AI as an ever-present "learning partner" that stands by their side, offering consistent support and encouragement as they navigate the complexities of language acquisition.

The terms "Teacher" (3 responses), "Coach" (2 responses), and "Trainer" (1 response) illustrate students' perception of AI as an active instructional presence. These metaphors indicate that AI-ES is seen not only as a passive resource but as a guiding figure that actively facilitates skill development, similar to the role a teacher or coach plays in a classroom or training environment. By choosing these metaphors, students emphasize AI's role in helping them hone their skills and reach their potential.

Metaphors like "Assistant" (2 responses), "Helper" (1 response), and "Aide" (1 response) highlight the supportive role of AI in offering practical, hands-on assistance with language tasks. These terms suggest that students appreciate AI's ability to provide immediate help and solutions, making their learning process smoother and more accessible. This perception positions AI-ES as an accessible "right-hand helper," readily

available to assist with language challenges as they arise.

Additionally, students used terms like “Advisor,” “Consultant,” and “Counselor” (1 response each) to describe AI’s role as a trusted guide offering personalized advice. These metaphors indicate that students view AI as a knowledgeable resource that provides customized suggestions and feedback, helping them make informed decisions in their language learning. This conceptualization emphasizes AI’s advisory role, allowing students to feel guided and supported in a way that feels relevant to their specific learning needs.

Lastly, terms such as “Encourager” (2 responses) and “Supporter” (1 response) capture students’ appreciation for AI’s role in boosting their confidence and motivation. These metaphors convey that students see AI not only as a tool but as an empathetic presence that offers encouragement, helping them stay motivated and engaged as they progress.

In sum, the “Personalized Assistance” metaphors depict AI-ES as a versatile, individualized support system. Students conceptualize AI as a “Partner,” “Teacher,” “Assistant,” and “Encourager”—a resource that adapts to their unique needs, offers reliable guidance, and provides the motivation necessary to succeed. This category reveals students’ appreciation for the tailored assistance AI provides, highlighting its role as a customized aid in their language-learning journey.

4.2.5 Complexity: AI-ES as a multifaceted challenge

The “Complexity” category, consisting of 25 metaphors, reflects students’ perception of AI-assisted English-speaking (AI-ES) as an intricate tool that presents both challenges and learning opportunities. Students describe AI-ES with terms like “Maze” (5 responses), “Labyrinth” (1 response), and “Web” (2 responses), suggesting that navigating AI’s features feels like exploring a complex network. This portrayal highlights a sense of immersion and trial, as students seek to understand and utilize AI’s full potential.

Other metaphors, such as “Riddle” (2 responses), “Puzzle” (2 responses), and “Challenge” (2 responses), emphasize the mental engagement AI-ES demands. These images capture the sense of AI-ES as something to be solved, presenting students with intellectual obstacles that require critical thinking. By framing AI as a “puzzle,” students convey a view of AI-ES as both intriguing and demanding, with learning embedded in overcoming its complexities.

Metaphors like “Cloud” (2 responses) and “Storm” (1 response) imply that AI-ES can feel ambiguous or hard to grasp, suggesting a sense of uncertainty about the technology’s inner workings. Terms such as “Forest” (2 responses) and “Mountain” (1 response) evoke vast, daunting landscapes, portraying AI as an environment requiring navigation and persistence. This framing underscores both the vastness of AI’s possibilities and the effort needed to explore them.

Finally, descriptors like “Machine” (1 response) and “Obstacle” (1 response) reinforce the idea of AI-ES as a powerful, sometimes resistant tool that requires skill to operate effectively. Students see AI-ES as a resource with great potential but recognize that mastering it involves overcoming inherent complexities.

In summary, “Complexity” metaphors depict AI-ES as both a challenge and an opportunity, a “Maze” or “Riddle” that requires students to navigate and engage deeply. This category highlights a balanced view: students appreciate the support AI-ES offers

but remain aware of its limitations and the effort required to harness it effectively.

4.2.6 Over-reliance: AI-ES as a double-edged tool

The “Over-Reliance” category, with 16 metaphors, reflects students’ cautious perspective on using AI-assisted English-speaking (AI-ES) tools. Metaphors like “Crutch” (2 responses), “Backup” (2 responses), and “Lifeline” (2 responses) suggest that while AI-ES is supportive, it risks fostering dependency, potentially reducing students’ ability to practice independently. These terms evoke the idea of AI as a fallback, which, though helpful, could limit self-reliance over time.

Other terms, such as “Wheels” (2 responses) and “Habit” (2 responses), highlight AI’s role as a temporary aid, one that students should ideally progress beyond as they gain confidence and skill. This perspective implies that while AI-ES provides valuable support, it should complement rather than replace traditional learning methods.

Metaphors like “Blanket” (2 responses) and “Comfort” (1 response) emphasize the reassuring aspect of AI-ES, suggesting it makes language practice feel safer and less intimidating. However, students recognize that this comfort could discourage them from tackling challenging language tasks on their own.

Overall, the “Over-Reliance” metaphors present AI-ES as a double-edged tool—a “Crutch” or “Safety Net” that, if overused, might undermine students’ growth. This category underscores the importance of balancing AI support with independent practice to avoid becoming overly dependent on technology.

5. DISCUSSION

This study explored students’ metaphorical perceptions of AI-assisted English-speaking (AI-ES) learning and practising, revealing diverse views on the capabilities, limitations, and impact of these technologies on language learning. The findings were organized into six metaphor categories: *Enhanced Practice Opportunities*, *Language Learning Facilitator*, *Future Necessity*, *Personalized Assistance*, *Complexity*, and *Over-Reliance*. Each category provides insight into how students perceive AI-ES and its role in their language-learning journey.

First, most of the participants hold a positive perception of AI-ES learning and practising. Many of them (26.8%) viewed AI-ES as a versatile platform for continuous practice, describing it with terms like “Practice” and “Rehearsal.” These metaphors suggest that students value AI’s ability to provide a risk-free environment where they can engage in repetitive exercises to build fluency and confidence. The implication here is that AI-ES tools fulfil an essential need for accessible, on-demand practice, which may be particularly beneficial for students who lack regular opportunities for live conversation. Besides, some students (25.9%) saw AI-ES as a “Facilitator,” an active partner in the language learning process. Metaphors like “Teacher” and “Coach” reflect the perception of AI as an intelligent system that provides guidance, feedback, and correction. This perception suggests that students recognize AI’s role in assisting with pronunciation, vocabulary, and grammar, highlighting its effectiveness in offering personalized, immediate feedback.

Second, with terms such as “Compass” and “Key,” students conveyed a strong belief that AI will be an integral part of future education. These metaphors underscore students’ anticipation that AI-ES tools will evolve into essential resources for language learning. The expectation of AI as a future necessity suggests that students perceive it as

a powerful educational tool that, in the coming years, may become ubiquitous in language learning environments. Moreover, the metaphors in the “Personalized assistance” category, including “Partner” and “Companion,” expose students’ appreciation of AI-ES as a supportive, personalized resource. They see AI-ES as providing tailored guidance, helping them address specific areas of improvement. This reflects the desire for a learning tool that adapts to individual needs, allowing students to proceed at their own pace, which could help reduce anxiety and boost confidence.

However, students also acknowledged the challenges posed by AI-ES, describing it as a “Maze” or “Puzzle.” These metaphors reflect frustration with the complex interface or technical limitations of AI tools, which may hinder the learning process. This complexity could suggest that, while students recognize the benefits of AI, they also find it sometimes challenging to navigate or understand, especially when technology does not align with their learning style or needs.

Finally, metaphors such as “Crutch” and “Safety Net” suggest a concern that AI-ES could lead to dependency. Students appreciate the support AI-ES offers but are cautious about relying too heavily on it, as it may inhibit their independent practice. This indicates a balanced view, where students see AI as a useful supplementary tool but are aware of the need for autonomy in language learning.

5.1 Implications

The findings from this study have important implications for educators, AI developers, and language learning institutions. For educators, understanding these metaphorical perceptions allows educators to better integrate AI-ES tools into their curriculum. Educators can leverage the perceived strengths, such as enhanced practice opportunities and personalized assistance, to provide students with tailored assignments that maximize AI-ES benefits. Additionally, by being aware of students’ concerns about over-reliance and complexity, educators can guide students in balancing AI use with traditional learning methods. For AI developers, this study suggests a need for user-friendly interfaces that mitigate the “Complexity” students experience. Developers should consider integrating features that make the AI-ES interface intuitive and accessible, ensuring it caters to a wide range of learners. Enhanced feedback mechanisms could also address students’ desire for personalized assistance, making the AI feel more like a “Coach” or “Guide.” Language Learning Institutions, institutions should consider the value students place on AI-ES as a “Future Necessity” and make efforts to integrate AI tools in a way that complements existing resources. Offering workshops on effective AI-ES use could help students maximize the benefits while avoiding over-reliance.

5.2 Limitations

This study is not without limitations. First, the metaphorical perceptions were gathered from a limited sample, which may not represent the views of all EFL students. The findings are also context-specific, potentially limiting their generalizability to other learning environments or types of AI-ES tools. Additionally, students’ understanding of AI capabilities might evolve, and future studies could yield different perceptions as AI technologies continue to improve.

5.3 Suggestions for Future Research

Future research could build on this study by exploring how perceptions of AI-ES change over time, especially as students gain more familiarity with these tools. A longitudinal study could capture the dynamic nature of students’ attitudes toward AI in language learning. Additionally, future studies could examine the impact of specific AI features on learning outcomes, such as the effectiveness of personalized feedback versus generic

feedback. Research could also explore cultural differences in perceptions of AI-ES, as attitudes toward technology might vary across different regions and educational systems.

6. CONCLUSION

In conclusion, this study contributes valuable insights into EFL students' metaphorical perceptions of AI-ES tools, highlighting the nuanced ways they view these technologies as both beneficial and potentially challenging. By understanding these perceptions, educators, developers, and institutions can work toward creating a balanced approach to integrating AI in language education, promoting effective and autonomous learning.

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