

Artificial Intelligence (AI) and English Language Learning (ELL)

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ABSTRACT

The present study focused on exploring students' perceptions regarding the use of Artificial Intelligence (AI) tools in improving English language learning skills. With the integration of AI in education, tools such as grammar checkers, translation systems, writing assistants, and vocabulary-building applications have become generally used among English language learners (ELLs). This study focused on investigating how these tools help in improving learners' skills in areas such as grammar accuracy, vocabulary development, writing fluency, speaking practice, reading comprehension, and overall confidence in using English. A quantitative research design was used, and data were collected through a structured questionnaire from 50 respondents. The data were analyzed using descriptive statistics, including frequency distributions, means, medians, modes, and standard deviations. The results showed that a major portion of respondents held a positive perception of AI tools, especially in enhancing vocabulary, grammar accuracy, writing skills, and understanding complex texts. Most of the mean scores ranged from moderate to high agreement levels, indicating general acceptance of AI as an effective learning aid. However, the results also showed that perceptions regarding speaking skill development and immediate feedback were relatively varied, suggesting that AI tools are perceived as more effective for written and receptive skills than for oral communication. Overall, the study concludes that AI tools play a significant supportive role in English language learning, although their effectiveness varies across different language skills. The study recommends further enhancement of AI-based speaking applications, integration of AI tools into classroom teaching, and expanded research with larger and more diverse samples to better understand their long-term impact on language learning outcomes.

Keywords: Artificial Intelligence, English Language Learning, AI Tools, Language Skills, Student Perception, Educational Technology

INTRODUCTION

Artificial Intelligence (AI) is widely recognized as one of the most transformative technological advancements of the twenty-first century. Its rapid development has significantly influenced various sectors, including healthcare, business, communication, and education. In educational settings, AI technologies are increasingly being integrated into teaching and learning processes to enhance instructional quality, improve learner engagement, and support academic success. Among the educational fields experiencing substantial change due to AI is language education, particularly the teaching and learning of English as a Second Language (ESL) and English as a Foreign Language (EFL). As a result, English Language Learners (ELLs) are increasingly utilizing AI-powered tools to strengthen their language proficiency through personalized and interactive learning opportunities.

AI denotes computer systems designed to imitate human intelligence, including learning, reasoning, problem-solving, and language processing (Russell & Norvig, 2021). In language learning settings, technologies such as intelligent tutoring systems, automated writing evaluation software, speech recognition systems, machine translation apps, and conversational chatbots have gained popularity as instructional resources. These tools deliver immediate corrective feedback, adaptive instruction, and opportunities for autonomous study (Holmes et al., 2019). Platforms like ChatGPT, Grammarly, and Duolingo allow learners to practice grammar, pronunciation, vocabulary, writing, and communication outside conventional classrooms. Traditional English language teaching was largely dominated by teacher-centered methods, in which learners had restricted opportunities for personalized instruction and ongoing feedback. With the continuous development of educational technologies, there has been a gradual transition toward learner-centered approaches that promote autonomy, interaction, and flexibility (Kukulska-Hulme, 2020). AI-powered technologies facilitate self-directed learning by enabling learners to access educational materials at any time and from any location. As a result, English Language Learners (ELLs) are able to participate in independent practice and benefit from personalized learning experiences tailored to their specific needs and levels of language proficiency. (Kukulska-Hulme, 2020) Evidence suggests that AI-supported environments strengthen learner motivation, engagement, and confidence (Kohnke, Moorhouse, & Zou, 2023; Godwin-Jones, 2021). Kohnke, Moorhouse, and Zou (2023) noted that conversational AI tools encourage more frequent English practice by reducing anxiety about making errors. Similarly, Godwin-Jones (2021) argued that AI aids language acquisition through instant feedback and adaptive mechanisms that help learners detect and correct mistakes efficiently. For example, automated writing evaluation systems help students improve grammatical accuracy and writing fluency by providing rapid responses to their work (Kohnke, Moorhouse, & Zou, 2023).

Although these benefits, incorporating AI into language education has raised a range of pedagogical and ethical issues (Kasneci et al., 2023; Williamson & Eynon, 2020). Researchers note that overreliance on content produced by AI can reduce learners' critical thinking, creativity, and capacity for producing authentic language (Kasneci et al., 2023). In addition, when students use AI-generated answers without understanding them, these tools can facilitate academic dishonesty and plagiarism (Kasneci et al., 2023). Problems related to misinformation, biased algorithms, and data privacy continue to pose major challenges in educational settings (Williamson & Eynon, 2020). Because AI systems are not consistently accurate or culturally appropriate, learners risk encountering misleading or unsuitable information if the tools are used without adequate supervision (Williamson & Eynon, 2020). The role of teachers in AI-supported language learning settings remains a subject of ongoing discussion. Although AI tools can assist with instruction and offer additional learning opportunities, they are not a substitute for the human interaction, emotional support, and professional judgment that educators provide. Consequently, teachers are essential in helping learners use AI technologies ethically and effectively in language education.

As the use of AI-powered educational tools continues to grow, it is important to assess both the benefits and limitations of AI-assisted English language learning. This study examines how Artificial Intelligence can support English Language Learners and considers its influence on language proficiency, learner autonomy, motivation, and instructional practices. It also addresses the ethical and pedagogical considerations associated with integrating AI into current language learning environments.

LITERATURE REVIEW

AI in language education

AI denotes computational systems designed to execute tasks that usually depend on human intelligence, such as learning, reasoning, and language processing (Russell & Norvig, 2021). Within educational

contexts, AI technologies are used to facilitate personalized instruction, automated evaluation, and adaptive learning environments.

AI-based educational platforms create personalized learning experiences by examining students' performance data and adjusting instructional materials to meet individual learning needs (Luckin et al., 2016). In the context of language learning, these tools can assess learners' grammar, pronunciation, vocabulary use, and writing quality.

Studies show that AI technologies can enhance learners' engagement and motivation. Wang and Petrina (2023) note that language applications using AI promote active involvement and self-directed learning among ELLs. In the same way, feedback tailored by AI systems enables learners to recognize their weaknesses and develop language proficiency more efficiently.

Benefits of AI for English Language Learners

Personalized Learning

A major advantage of AI lies in its capacity to deliver learning experiences tailored to individual students. AI systems evaluate learners' strengths and areas needing development, enabling them to provide customized exercises and recommendations. This individualized approach allows ELLs to advance at a pace and in a manner that fits their specific learning needs (Holmes et al., 2022).

Immediate Feedback

Writing tools powered by AI offer rapid feedback on grammar, spelling, and sentence structure. This instant response helps learners recognize and correct mistakes quickly, which increases the efficiency of the learning process (Ranalli, 2021).

Increased Learner Autonomy

AI technologies encourage independent study by allowing students to practice English without constant teacher supervision. Learners can engage in writing tasks, pronunciation drills, and other language activities whenever it suits them, which supports greater autonomy in learning (Godwin-Jones, 2021).

Enhanced Motivation and Engagement

Gamification features in AI-based applications make language learning more interactive and enjoyable. Elements such as achievement badges, progress tracking, and conversational chatbots help maintain learner interest and strengthen motivation to participate actively (Kohnke et al., 2023).

Challenges and Ethical Concerns

Despite these benefits, the use of AI in language education raises several challenges.

Overreliance on AI

Excessive dependence on AI tools can restrict the development of critical thinking and problem-solving skills. Learners may rely on content generated by AI rather than building their own writing proficiency and analytical capabilities (Selwyn, 2019).

Academic Integrity Issues

The adoption of AI technologies can create concerns regarding academic honesty and originality. Some students may submit work produced by AI without understanding the material or contributing original ideas, leading to plagiarism and unethical academic conduct (Cotton et al., 2023).

Accuracy and Reliability

Even though AI systems are advanced, they are not always accurate. Language models occasionally generate incorrect or misleading information, which can negatively affect learning if users accept the content without verification (Kasneci et al., 2023).

Privacy and Data Security

Many AI applications collect and analyze user data to improve performance and personalization. Consequently, issues related to data privacy and security remain significant, especially in educational environments involving students and institutional records (Williamson & Eynon, 2020).

METHODOLOGY

Research Design

The present study used a quantitative research design to probe the role of AI in English Language Learning (ELL). A questionnaire was used to collect the data concerning learner's perceptions, experiences and attitudes toward the use of AI-powered sources in English language learning.

Participants

This study includes 50 participants. All were the English Language Learners from undergraduate level. They were selected through convenience sampling. The sample of participants were consisted of both male and female students who had experience of using AI-based sources for learning English. They were informed about the purpose of the study and asked to complete the questionnaire.

Research Instrument

A structured questionnaire was developed by the researcher to get the data. To construct the questionnaire previous studies on AI and English language learning were explored. This first section gathered demographic information including gender, program, background and English proficiency level. The second section consisted on 6 Likert-scale statements while third section comprised 7 Liker-scale statements.

Data Collection Procedure

The questionnaire was distributed among participants through online and face-to-face modes. Proper time was given to them to complete the questionnaire. All the information was provided. Purpose of the study was explained and they were assured that their responses would remain confidential and were only used for academic purposes.

DATA ANALYSIS

After data collection, the responses were coded and entered into the Statistical Package for the Social Sciences (SPSS) for analysis. Descriptive statistical techniques, including frequencies, percentages, means, and standard deviations, were used to summarize participants' responses. In addition, reliability analysis was conducted using Cronbach's Alpha to assess the internal consistency of the questionnaire. The statistical findings were then interpreted to examine the effectiveness, benefits, and challenges of AI-assisted English language learning among the participants.

Analysis

Cronbach Alpha Test

Reliability Statistics	
Cronbach's Alpha	N of Items
.720	13

Interpretation of the Reliability Statistics Table

Reliability Measure	Value
Cronbach's Alpha	0.720
Number of Items	13

The above table exhibits the reliability analysis of the questionnaire comprising on 13 items. Cronbach's Alpha was conducted to measure the internal consistency of the items. The Cronbach's Alpha value is 0.720 which is acceptable level of reliability. It suggests that the items have satisfactory internal consistency.

Statistical Interpretation of Demographic Information

		Statistics				
		sex of the respondents	University or college of the respondents	Degree of the respondents	English proficiency level of respondents	Area of the respondents
N	Valid	50	50	50	50	50
	Missing	0	0	0	0	0
Mean		1.5400	1.6200	1.5000	2.1800	1.3400

Median	2.0000	2.0000	1.5000	2.0000	1.0000
Mode	2.00	2.00	1.00 ^a	2.00	1.00
Std. Deviation	.50346	.49031	.50508	.62890	.51942

This table explains the descriptive statistics (mean, median, mode and standard deviation) for the demographic characteristics of 50 participants.

Number of Responses

All variables have **50 valid responses** and **no missing data**, indicating that every participant answered all demographic questions included in the survey.

Sex of the Respondents

The mean value for sex variable is **1.54**. The value for median and mode is **2.00** respectively. This shows that gender category “2” means “**female**” was more common among participants. The standard deviation is **0.503** which indicates a balanced distribution between two categories.

University or College of the Respondents

The mean value is **1.62**, while both the median and mode are **2.00**. This suggests that respondents from the institution represented by category "2" (private) constituted a larger proportion of the sample. The standard deviation of **0.490** indicates limited variation among responses.

Degree of the Respondents

The mean score for the degree or program is **1.50**, with a median of **1.50**. The mode is **1.00**, although the note indicates that multiple modes exist, meaning more than one category occurred with the same highest frequency. The standard deviation of **0.505** shows a relatively even distribution of respondents across degree categories.

English Proficiency Level of Respondents

The mean score is **2.18**, with both the median and mode equal to **2.00**. This indicates that most respondents belonged to proficiency level category "2" (intermediate). The standard deviation of **0.629** reflects a moderate degree of variation in English proficiency levels among participants.

Area of the Respondents

The mean score is **1.34**, while both the median and mode are **1.00**. This suggests that most respondents belonged to area category "1" (urban). The standard deviation of **0.519** indicates some variation, although responses were concentrated in one category.

Explanation of variables of AI Usage Patterns

Explanation of Descriptive Statistics

1. I regularly use AI tools to improve my English skills.

Statistics		
I regularly use AI tools to improve my English skills.		
N	Valid	50
	Missing	0
Mean		3.4400
Median		4.0000
Mode		4.00
Std. Deviation		1.01338

Explanation

A total of **50 respondents** answered this questionnaire item, and there were **no missing responses**, indicating complete participation.

The **mean score of 3.44** highlights that respondents largely **agreed** with the statement that they regularly use AI tools to improve their English skills. Since the mean is above the midpoint of a typical five-point Likert scale, it indicates a positive tendency toward AI tool usage.

The **median value of 4.00** shows that at least half of the respondents selected "**Agree**" or a higher response category. Similarly, the **mode of 4.00** indicates that "**Agree**" was the most frequently chosen response.

The **standard deviation of 1.013** suggests a moderate level of variation in responses. While many participants agreed that they regularly use AI tools, some respondents selected different response options, reflecting varying levels of AI usage among the participants.

I regularly use AI tools to improve my English skills.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	4	8.0	8.0	8.0
	Disagree	4	8.0	8.0	16.0
	Neutral	11	22.0	22.0	38.0

	Agree	28	56.0	56.0	94.0
	Strongly agree	3	6.0	6.0	100.0
	Total	50	100.0	100.0	

The table shows the responses of **50 participants** regarding the statement:

“I regularly use AI tools to improve my English skills.”

Response Distribution

- **Strongly Disagree:** 4 respondents (8%)
- **Disagree:** 4 respondents (8%)
- **Neutral:** 11 respondents (22%)
- **Agree:** 28 respondents (56%)
- **Strongly Agree:** 3 respondents (6%)
- **Total:** 50 respondents (100%)

Explanation

Majority of the participants shows positive attitude toward using AI tools for improving their English skills.

The majority of respondents **62% (Agree + Strongly Agree)** informed that they regularly use AI tools for English learning. This shows that most participants actively rely on AI-based resources for language improvement. **22% of respondents remained neutral**, which indicates that a noteworthy portion neither strongly agrees nor disagrees. They are inconsistent in use of AI tools. Only **16% (Disagree + Strongly Disagree)** reported that they do not regularly use AI tools, showing a relatively small group of non-users.

2. I use AI tools for grammar correction.

Statistics		
I use AI tools for grammar correction.		
N	Valid	50
	Missing	0
Mean		3.6400
Median		4.0000

Mode	4.00
Std. Deviation	.96384

Explanation

A total of **50 respondents** participated in this item, with **no missing responses**, indicating complete data collection.

The **mean score of 3.64** indicates that, on average, respondents **agree** that they use AI tools for grammar correction. This suggests a generally positive tendency toward using AI-based grammar support.

The **median value of 4.00** shows that at least half of the respondents selected **“Agree” or higher**, while the **mode of 4.00** indicates that **“Agree”** was the most frequently selected response.

The **standard deviation of 0.964** highlights a moderate spread in responses. While many respondents agree with the statement, there is still some variation in how frequently individuals use AI tools for grammar correction.

I use AI tools for grammar correction.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	2	4.0	4.0	4.0
	Disagree	5	10.0	10.0	14.0
	Neutral	8	16.0	16.0	30.0
	Agree	29	58.0	58.0	88.0
	Strongly Agree	6	12.0	12.0	100.0
	Total	50	100.0	100.0	

The table presents the responses of **50 participants** regarding the statement:

“I use AI tools for grammar correction.”

Response Distribution

- **Strongly Disagree:** 2 respondents (**4%**)
- **Disagree:** 5 respondents (**10%**)
- **Neutral:** 8 respondents (**16%**)
- **Agree:** 29 respondents (**58%**)

- **Strongly Agree:** 6 respondents (12%)
- **Total:** 50 respondents (100%)

Explanation

The results indicate that a significant proportion of the participants has a positive attitude towards using AI tools for grammar correction.

A combined **70% of respondents (Agree + Strongly Agree)** suggested that they use AI tools for grammar correction, which is an indication of strong confidence on AI-based grammar support among participants. **16% of respondents remained neutral**, which suggests that participants occasionally use AI tools or uncertain about the use of AI tools for this purpose. Only a small proportion **14% of respondents (Disagree + Strongly Disagree)** stated that they do not use AI tools for grammar correction.

3. I use AI tools to improve vocabulary.

Statistics		
I use AI tools to improve vocabulary.		
N	Valid	50
	Missing	0
Mean		3.6600
Median		4.0000
Mode		4.00
Std. Deviation		.82338

Explanation

A total of **50 respondents** participated in this item, and there were **no missing responses**, indicating complete data collection.

The **mean score is 3.66** which indicates that participants usually **agree** that they use AI tools to improve their vocabulary. This highlights a positive inclination toward using AI for vocabulary development in English learning.

The **median value of 4.00** shows that at least half of the respondents selected **“Agree” or higher**, while the **mode of 4.00** indicates that **“Agree”** was the most frequently chosen response among participants.

The **standard deviation of 0.823** is comparatively low, suggesting that responses are fairly consistent and grouped around the agreement level, with less variation compared to other items.

I use AI tools to improve vocabulary.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	2.0	2.0	2.0
	Disagree	5	10.0	10.0	12.0
	Neutral	7	14.0	14.0	26.0
	Agree	34	68.0	68.0	94.0
	Strongly agree	3	6.0	6.0	100.0
	Total	50	100.0	100.0	

The table presents the responses of **50 participants** regarding the statement:

“I use AI tools to improve vocabulary.”

Response Distribution

- **Strongly Disagree:** 1 respondent (2%)
- **Disagree:** 5 respondents (10%)
- **Neutral:** 7 respondents (14%)
- **Agree:** 34 respondents (68%)
- **Strongly Agree:** 3 respondents (6%)
- **Total:** 50 respondents (100%)

Explanation

The results indicate a strong positive tendency toward the use of AI tools for vocabulary improvement among respondents.

A significant proportion of **74% of respondents (Agree + Strongly Agree)** stated that they use AI tools to improve their vocabulary. This highlights that majority of the participants actively trust on AI-based tools for vocabulary development in English learning. **14% of respondents remained neutral**, suggesting occasional or uncertain use of AI tools for vocabulary enhancement. Comparatively a very small percentage **12% of respondents (Disagree + Strongly Disagree)** informed that they do not use AI tools for this purpose.

4. I use AI tools to practice writing essays or assignments.

Statistics		
I use AI tools to practice writing essays or assignments.		
N	Valid	50
	Missing	0
Mean		3.9600
Median		4.0000
Mode		4.00
Std. Deviation		.98892

Explanation

A total of **50 respondents** participated in this item, and there were **no missing responses**, indicating complete data collection.

The **mean score of 3.96** indicates a significant majority of participants stated agreement among respondents that they use AI tools to practice writing essays or assignments. This suggests that AI tools are widely used for academic writing support.

The **median value of 4.00** shows that at least half of the respondents selected “**Agree**” or **higher**, while the **mode of 4.00** indicates that “**Agree**” was the most frequently selected response.

The **standard deviation of 0.989** indicates a moderate level of variation in responses, meaning that while most respondents agree, there are some differences in how frequently or consistently they use AI tools for writing practice.

I use AI tools to practice writing essays or assignments.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	2.0	2.0	2.0
	Disagree	4	8.0	8.0	10.0
	Neutral	7	14.0	14.0	24.0
	Agree	22	44.0	44.0	68.0
	Strongly agree	16	32.0	32.0	100.0

	Total	50	100.0	100.0	
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The table presents the responses of **50 participants** regarding the statement:

“I use AI tools to practice writing essays or assignments.”

Response Distribution

- **Strongly Disagree:** 1 respondent (2%)
- **Disagree:** 4 respondents (8%)
- **Neutral:** 7 respondents (14%)
- **Agree:** 22 respondents (44%)
- **Strongly Agree:** 16 respondents (32%)
- **Total:** 50 respondents (100%)

Explanation

The results show a highly positive response regarding the use of AI tools for practicing essay and assignment writing.

A combined **76% of respondents (Agree + Strongly Agree)**, a considerable majority, indicated that they use AI tools for writing practice. This highlights that most participants actively rely on AI for developing academic writing skills such as essays and assignments. **14% of respondents remained neutral**, suggesting that some participants use AI tools occasionally or are uncertain about their usage. Only **10% of respondents (Disagree + Strongly Disagree)** reported that they do not use AI tools for writing practice, representing a very small minority.

5. AI tools help me practice speaking skills.

Statistics		
AI tools help me practice speaking skills.		
N	Valid	50
	Missing	0
Mean		3.2400
Median		3.0000
Mode		4.00

Std. Deviation	1.06061
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Explanation

A total of **50 respondents** participated in this item, and there were **no missing responses**, indicating complete data collection.

The **mean score** is **3.24** which indicates that respondents are generally **neutral to slightly agree** that AI tools help them practice speaking skills. This highlights a moderate level of perceived usefulness of AI for speaking practice.

The **median value** is **3.00** which shows that the dominant response is “**Neutral**,” meaning that at least half of the respondents did not strongly agree or disagree. However, the **mode of 4.00** indicates that the most frequently selected response was “**Agree**,” suggesting a slight tendency toward positive perception among a portion of respondents.

The **standard deviation** is **1.061** which suggests comparatively higher variation in responses as compared to other items. This indicates that respondents have diverse opinions about the effectiveness of AI tools for speaking practice.

AI tools help me practice speaking skills.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	5	10.0	10.0	10.0
	Disagree	5	10.0	10.0	20.0
	Neutral	16	32.0	32.0	52.0
	Agree	21	42.0	42.0	94.0
	Strongly agree	3	6.0	6.0	100.0
	Total	50	100.0	100.0	

The table presents the responses of **50 participants** regarding the statement:

“AI tools help me practice speaking skills.”

Response Distribution

- **Strongly Disagree:** 5 respondents (10%)
- **Disagree:** 5 respondents (10%)
- **Neutral:** 16 respondents (32%)
- **Agree:** 21 respondents (42%)

- **Strongly Agree:** 3 respondents (6%)
- **Total:** 50 respondents (100%)

Explanation

The table indicates diversity of opinions but somehow a positive opinion of AI tools in improving speaking skills.

A combined **48% of respondents (Agree + Strongly Agree)** consider that AI tools help them practice speaking skills. This shows that nearly half of the participants find AI useful for oral language development. A significant portion, **32% of respondents**, remained neutral which highlights that participants are uncertain about the use of AI tools for speaking practice or have limited experience. Meanwhile, **20% of respondents (Disagree + Strongly Disagree)** stated that AI tools do not help them with speaking skills, showing a notable minority with negative views.

6. I rely on AI tools for translation.

Statistics		
I rely on AI tools for translation.		
N	Valid	50
	Missing	0
Mean		3.4400
Median		3.5000
Mode		3.00
Std. Deviation		1.05289

Explanation

A total of **50 respondents** participated in this item, with **no missing data**, indicating complete responses.

The **mean score of 3.44** illustrates that respondents generally moves between **neutral and agree** and it expresses a moderate level of confidence on AI tools for translation purposes.

The **median value of 3.50** also supports this interpretation, indicating that half of the respondents are slightly above the neutral point, leaning toward agreement.

The **mode of 3.00** shows that the most frequently selected response was “**Neutral,**” meaning many respondents neither strongly agreed nor disagreed.

The **standard deviation of 1.053** expresses a comparatively high level of variation in responses, suggesting that participants have diverse opinions and different levels of dependence on AI translation tools.

I rely on AI tools for translation.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	4	8.0	8.0	8.0
	Disagree	2	4.0	4.0	12.0
	Neutral	19	38.0	38.0	50.0
	Agree	18	36.0	36.0	86.0
	Strongly agree	7	14.0	14.0	100.0
	Total	50	100.0	100.0	

The table presents the responses of **50 participants** regarding the statement:

“I rely on AI tools for translation.”

Response Distribution

- **Strongly Disagree:** 4 respondents (8%)
- **Disagree:** 2 respondents (4%)
- **Neutral:** 19 respondents (38%)
- **Agree:** 18 respondents (36%)
- **Strongly Agree:** 7 respondents (14%)
- **Total:** 50 respondents (100%)

Explanation

The results show a mixed but slightly positive propensity toward confidence on AI tools for translation.

A combined **50% of respondents (Agree + Strongly Agree)** described that they trust on AI tools for translation. This specifies that half of the participants actively use AI tools for translating text or language content. A fairly large portion, **38% of respondents**, remained neutral, suggesting that many participants use AI tools occasionally or are uncertain about their dependence on them. Only **12% of respondents (Disagree + Strongly Disagree)** reported that they do not rely on AI tools for translation, showing a small minority of non-users.

Explanation of variables of Perceived Effectiveness of AI

Explanation of Descriptive Statistics

1. AI tools improve my English grammar accuracy.

Statistics		
AI tools improve my English grammar accuracy.		
N	Valid	50
	Missing	0
Mean		3.6600
Median		4.0000
Mode		4.00
Std. Deviation		.71742

Explanation

A total of **50 respondents** participated in this item, with **no missing responses**, indicating complete data collection.

The **mean score** is **3.66** which explains that respondents generally **agree** that AI tools improve their English grammar accuracy. This suggests a positive perception of AI tools in enhancing grammatical correctness.

The **median value of 4.00** shows that at least half of the respondents selected “**Agree**” or **higher**, while the **mode of 4.00** indicates that “**Agree**” was the most frequently selected response.

The **standard deviation** is **0.717** which is relatively low and expresses that responses are closely clustered around the agreement level. This suggests a strong level of consensus among respondents.

AI tools improve my English grammar accuracy.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	disagree	2	4.0	4.0	4.0
	Netural	18	36.0	36.0	40.0
	Agree	25	50.0	50.0	90.0
	Strongly agree	5	10.0	10.0	100.0

	Total	50	100.0	100.0	
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The table presents the responses of **50 participants** regarding the statement:

“AI tools improve my English grammar accuracy.”

Response Distribution

- **Disagree:** 2 respondents (4%)
- **Neutral:** 18 respondents (36%)
- **Agree:** 25 respondents (50%)
- **Strongly Agree:** 5 respondents (10%)
- **Total:** 50 respondents (100%)

Explanation

The results exhibits a largely positive insight of AI tools in improving English grammar accuracy.

A combined **60% of respondents (Agree + Strongly Agree)** consider that AI tools improve their grammar accuracy. This indicates that majority of participants recognize the usefulness of AI in improving grammatical correctness in English writing. **36% of respondents remained neutral**, which shows uncertainty or occasional use of AI tools without strong trust or clear result about their effectiveness. Only **4% of respondents disagreed**, indicating very few participants do not perceive AI tools as helpful for grammar improvement.

2. AI tools enhance my vocabulary knowledge.

Statistics		
AI tools enhance my vocabulary knowledge.		
N	Valid	50
	Missing	0
Mean		3.9400
Median		4.0000
Mode		4.00
Std. Deviation		.65184

Explanation

A total of **50 respondents** participated in this item, with **no missing responses**, indicating complete data collection.

The **mean score** is **3.94** which highlights a significant level of agreement among respondents that AI tools improve their vocabulary knowledge. This states that participants generally think AI tools as highly effective for vocabulary development

The **median value** is **4.00** which shows that at least half of the respondents nominated **“Agree” or higher**, while the **mode of 4.00** indicates that **“Agree”** was the most regularly chosen response.

The **standard deviation of 0.652** is somewhat low, demonstrating robust reliability in responses. This proposes that majority of respondents share similar positive views concerning the role of AI tools in improving vocabulary knowledge.

AI tools enhance my vocabulary knowledge.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	4.0	4.0	4.0
	Neutral	6	12.0	12.0	16.0
	Agree	35	70.0	70.0	86.0
	Strongly agree	7	14.0	14.0	100.0
	Total	50	100.0	100.0	

The table presents the responses of **50 participants** regarding the statement:

“AI tools enhance my vocabulary knowledge.”

Response Distribution

- **Disagree:** 2 respondents (**4%**)
- **Neutral:** 6 respondents (**12%**)
- **Agree:** 35 respondents (**70%**)
- **Strongly Agree:** 7 respondents (**14%**)
- **Total:** 50 respondents (**100%**)

Explanation

The results show a very strong positive perception of AI tools in enhancing vocabulary knowledge.

A combined **84% of respondents (Agree + Strongly Agree)** consider that AI tools enhance their vocabulary knowledge. This highlights a resilient consent that AI plays an important role in vocabulary development. **12% of respondents remained neutral** which suggests that a few participants are either occasional users or uncertain about the level of improvement provided by AI tools. Only **4% of respondents disagreed**, showing that a small portion of participants do not think AI tools as helpful for vocabulary enhancement.

3. AI tools improve my writing fluency.

Statistics		
AI tools improve my writing fluency.		
N	Valid	50
	Missing	0
Mean		3.8200
Median		4.0000
Mode		4.00
Std. Deviation		.77433

Explanation

A total of **50 respondents** answered this questionnaire item, and there were **no missing responses**, indicating complete participation.

The **mean score of 3.82** suggests that respondents usually **agree** that AI tools enhance their writing fluency. Since the mean is close to 4.00 on a five-point Likert scale, it points out a positive believe that AI tools play significant role in helping learners write more smoothly and effectively.

The **median value of 4.00** indicates that almost half of the respondents selected **“Agree” or a higher category**, while the **mode of 4.00** indicates that **“Agree”** was the most frequently chosen response.

The **standard deviation of 0.774** is relatively low, suggesting that respondents' opinions were fairly consistent. Most participants shared similar positive views regarding the role of AI tools in improving writing fluency.

AI tools improve my writing fluency.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	3	6.0	6.0	6.0
	Netural	11	22.0	22.0	28.0

	Agree	28	56.0	56.0	84.0
	Strongly agree	8	16.0	16.0	100.0
	Total	50	100.0	100.0	

The table presents the responses of **50 participants** regarding the statement:

“AI tools improve my writing fluency.”

Response Distribution

- **Disagree:** 3 respondents (6%)
- **Neutral:** 11 respondents (22%)
- **Agree:** 28 respondents (56%)
- **Strongly Agree:** 8 respondents (16%)
- **Total:** 50 respondents (100%)

Explanation

The results highlight a positive opinion of AI tools in improving writing fluency.

A combined **72% of respondents (Agree + Strongly Agree)** think that AI tools help improve their writing fluency. This suggests that a major portion of participants find AI tools useful for improving smoother and more effective writing skills. **22% of respondents remained neutral**, which indicates that some participants are unclear about the extent to which AI tools contribute to their writing fluency. Only **6% of respondents disagreed**, showing that very few participants hold negative views regarding the effectiveness of AI tools in improving writing fluency.

4. AI tools help me understand complex texts.

Statistics		
AI tools help me understand complex texts.		
N	Valid	50
	Missing	0
Mean		4.1600
Median		4.0000
Mode		4.00

Std. Deviation	.65027
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Explanation

A total of **50 respondents** answered this questionnaire item, and there were **no missing responses**, indicating complete participation.

The **mean score of 4.16** indicates a **high level of agreement** among respondents that AI tools help them understand complex texts. Since the mean is above 4.00 on a five-point Likert scale, it suggests that participants generally view AI tools as highly effective in improving their comprehension of difficult reading materials.

The **median value of 4.00** shows that at least half of the respondents selected **“Agree” or a higher response category**, while the **mode of 4.00** indicates that **“Agree”** was the most frequently selected response.

The **standard deviation of 0.650** is relatively low, indicating that respondents' answers were fairly consistent. This suggests a strong level of consensus regarding the usefulness of AI tools for understanding complex texts.

AI tools help me understand complex texts.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	7	14.0	14.0	14.0
	Agree	28	56.0	56.0	70.0
	Strongly agree	15	30.0	30.0	100.0
	Total	50	100.0	100.0	

The table presents the responses of **50 participants** regarding the statement:

“AI tools help me understand complex texts.”

Response Distribution

- **Neutral:** 7 respondents (**14%**)
- **Agree:** 28 respondents (**56%**)
- **Strongly Agree:** 15 respondents (**30%**)
- **Total:** 50 respondents (**100%**)

Explanation

The results show an tremendously positive perception of AI tools in helping learners understand complex texts.

A combined **86% of respondents (Agree + Strongly Agree)** stated that AI tools help them understand complex texts. This shows that a large portion of participants find AI tools useful for enhancing reading comprehension and understanding difficult materials. **14% of respondents remained neutral**, which indicates that a small proportion of participants are uncertain about the effectiveness of AI tools in this area. Notably, **no respondents selected “Disagree” or “Strongly Disagree,”** indicating an absence of negative perceptions regarding the usefulness of AI tools for understanding complex texts.

5. AI tools increase my confidence in using English.

Statistics		
AI tools increase my confidence in using English.		
N	Valid	50
	Missing	0
Mean		3.5400
Median		4.0000
Mode		4.00
Std. Deviation		.95212

Explanation

A total of **50 respondents** answered this questionnaire item, and there were **no missing responses**, indicating complete participation in the survey.

The **mean score is 3.54** which suggests that respondents usually **agree** that AI tools increase their confidence in using English. Since the mean is above the midpoint of the scale, it reflects a positive perception of the role of AI in building learners' confidence.

The **median value of 4.00** indicates that at least half of the respondents selected **“Agree” or a higher response category**, while the **mode of 4.00** shows that **“Agree”** was the most frequently chosen response.

The **standard deviation of 0.952** indicates a moderate level of variation in responses. Although most respondents agreed with the statement, some differences in opinions exist regarding the extent to which AI tools enhance confidence in English usage.

AI tools increase my confidence in using English.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	2	4.0	4.0	4.0
	Disagree	5	10.0	10.0	14.0
	Neutral	12	24.0	24.0	38.0
	Agree	26	52.0	52.0	90.0
	Strongly agree	5	10.0	10.0	100.0
	Total	50	100.0	100.0	

The table presents the responses of **50 participants** regarding the statement:

“AI tools increase my confidence in using English.”

Response Distribution

- **Strongly Disagree:** 2 respondents (4%)
- **Disagree:** 5 respondents (10%)
- **Neutral:** 12 respondents (24%)
- **Agree:** 26 respondents (52%)
- **Strongly Agree:** 5 respondents (10%)
- **Total:** 50 respondents (100%)

Explanation

The results show a generally positive perception of AI tools in increasing confidence in English usage.

A combined **62% of respondents (Agree + Strongly Agree)** consider that AI tools enhance their confidence in using English. This expresses that majority of the participants feel more confident when using AI-assisted language tools. **24% of respondents remained neutral**, which indicates that a major portion of participants is uncertain or experience limited impact of AI tools on their confidence. **14% of respondents (Disagree + Strongly Disagree)** do not feel that AI tools improve their confidence, representing a smaller minority.

6. AI provides immediate feedback that helps me learn better.

Statistics		
AI provides immediate feedback that helps me learn better.		
N	Valid	50
	Missing	0
Mean		3.8800
Median		4.0000
Mode		4.00
Std. Deviation		.79898

Explanation

A total of **50 respondents** participated in this item, and there were **no missing responses**, indicating complete and reliable data collection.

The **mean score of 3.88** indicates that respondents mostly **agree** that AI provides immediate feedback that helps them learn better. This expresses a strong positive opinion of AI’s role in assisting learning through immediate correction and guidance.

The **median value is 4.00** which shows that at least half of the respondents selected **“Agree” or higher**, while the **mode of 4.00** shows that **“Agree”** was the most frequently chosen response.

The **standard deviation of 0.799** highlights moderate variation in responses, suggesting that while most respondents agree, there are small differences in the strength of their opinions regarding AI feedback effectiveness.

AI provides immediate feedback that helps me learn better.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	4.0	4.0	4.0
	Neutral	13	26.0	26.0	30.0
	Agree	24	48.0	48.0	78.0
	Strongly disagree	11	22.0	22.0	100.0
	Total	50	100.0	100.0	

The table presents the responses of **50 participants** regarding the statement:

“AI provides immediate feedback that helps me learn better.”

Response Distribution

- **Strongly Disagree:** 11 respondents (**22%**)
- **Disagree:** 2 respondents (**4%**)
- **Neutral:** 13 respondents (**26%**)
- **Agree:** 24 respondents (**48%**)
- **Total:** 50 respondents (**100%**)

Explanation

The results show a variety of perception regarding AI providing immediate feedback, though the overall trend is slightly positive.

A total of **48% of respondents agreed** that AI provides immediate feedback that helps them learn better. This shows that almost half of the participants recognize the usefulness of AI feedback in their learning process. **26% of respondents remained neutral**, which suggests they are uncertain about AI feedback or have limited experience with AI feedback systems. A significant portion, **26% (Strongly Disagree + Disagree)**, expressed negative views, indicating that more than one-quarter of respondents do not find AI feedback helpful.

7. AI learning is more engaging than traditional classroom learning.

Statistics		
AI learning is more engaging than traditional classroom learning.		
N	Valid	50
	Missing	0
Mean		3.5200
Median		4.0000
Mode		4.00
Std. Deviation		.88617

Explanation

A total of **50 respondents** participated in this item, with **no missing responses**, indicating complete data collection.

The **mean score is 3.52** which suggests that participants usually **agree to a moderate extent** that AI learning is more engaging than traditional classroom learning. This shows a slightly positive perception of AI-based learning engagement compared to conventional methods.

The **median value of 4.00** shows that at least half of the respondents selected **“Agree” or higher**, while the **mode of 4.00** indicates that **“Agree”** was the most frequently selected response.

The **standard deviation of 0.886** indicates a moderate level of variation in responses, suggesting that while many respondents find AI learning more engaging, others hold different or less strong opinions.

AI learning is more engaging than traditional classroom learning.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	2.0	2.0	2.0
	Disagree	5	10.0	10.0	12.0
	Neutral	16	32.0	32.0	44.0
	Agree	23	46.0	46.0	90.0
	Strongly agree	5	10.0	10.0	100.0
	Total	50	100.0	100.0	

The table presents the responses of **50 participants** regarding the statement:

“AI learning is more engaging than traditional classroom learning.”

Response Distribution

- **Strongly Disagree:** 1 respondent (2%)
- **Disagree:** 5 respondents (10%)
- **Neutral:** 16 respondents (32%)
- **Agree:** 23 respondents (46%)
- **Strongly Agree:** 5 respondents (10%)
- **Total:** 50 respondents (100%)

Explanation

The results expresses a generally positive but mixed perception of AI learning compared to traditional classroom learning.

A combined **56% of respondents (Agree + Strongly Agree)** consider that AI learning is more engaging than traditional classroom learning. This shows that more than half of the participants find AI-based learning more interactive and engaging. **32% of respondents remained neutral**, it suggests uncertainty or that their experiences with both learning methods are balanced. **12% of respondents (Disagree + Strongly Disagree)** do not consider AI learning is more engaging, indicating a small minority still prefer traditional classroom learning.

CONCLUSION

This study explored perception of students concerning the use of AI tools for the improvement of English language learning skills. The results of descriptive data analysis expresses a high level of positive attitude toward AI-assisted language learning among the respondents.

The results exhibit that majority of the respondents actively use AI tools for grammar correction, vocabulary development, writing practice, and comprehension of complex texts. Keeping in view the mean scores ranged from 3.5 to 4.1 highlights over-all agreement that AI tools are valuable for English learning. The high level of agreement were especially found in areas such as vocabulary enhancement, writing fluency, grammar accuracy, and understanding complex texts.

Despite of a high level of agreement for certain areas, the results indicate variation in responses for certain skills. Especially, speaking practice and immediate feedback received respectively low agreement and higher neutral responses. This highlights that the use of AI tools are considered effective and beneficial for reading and writing-related skills than for oral communication skills.

Finally, it can be concluded that AI tools are extensively accepted and considered useful educational support systems for improving English language proficiency. Their integration into language learning settings is regarded positive, though their efficiency varies across different language skill areas.

RECOMMENDATIONS

Based on the findings of the study, the following recommendations are proposed:

1. Integration of AI in Language Learning Classrooms

The educational institutions should equipped their classrooms with AI tools to support English language learning, especially in grammar, vocabulary and writing skills, pronunciation feedback, real-time conversation simulation and interactive speaking tasks.

2. Teacher Training Programs

Educational institutions must make arrangements for the training of teachers. Teachers should be trained to effectively integrate AI tools into classroom teaching so that students can benefit from guided and purposeful use of technology.

3. Balanced Use of Traditional and AI-Based Learning

AI sources should be the part of the learning therefore, it should integrate with traditional learning methods. The use of AI tools should be compulsory and not a replacement of traditional methods.

4. Encouraging Student Awareness

Different types of seminars and workshops should be conducted on regular bases to aware the students with the use and benefits of AI tools for language learning.

5. Institutional Support for Digital Learning Tools

Educational institutions must actively play their role in providing access to trustworthy AI-based learning platforms.

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