

Perceptions of Senior High School Students on the Use of Artificial Intelligent Tools in Language Learning

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ABSTRACT

The integration of artificial intelligence (AI) into education represents a transformative shift, offering innovative tools to enhance teaching and learning. This study investigated the perceptions of senior high school students toward the use of AI tools in language learning, focusing on five themes: AI as a virtual tutor, an assistant for writing, a study companion, a creativity enhancer, and a potential substitute for language teachers. Utilizing a quantitative research design, data were gathered from 327 students at Saint Mary's University Senior High School and Murong National High School in Nueva Vizcaya during the 2024–2025 academic year. Findings reveal that students generally hold neutral views about AI tools, recognizing their potential benefits, such as improved organization and accessibility, while expressing concerns regarding accuracy, originality, and over-reliance on technology. Notably, participants were skeptical of AI replacing human teachers, underscoring the irreplaceable value of human interaction in language education. These results inform the development of a policy framework advocating for the responsible, ethical, and effective integration of AI tools in language learning, emphasizing academic integrity, inclusivity, and equitable access while guiding educators and administrators in leveraging AI to complement traditional teaching methods. By offering insights into student attitudes, this study contributes to the growing discourse on AI in education. It informs the development of AI-driven pedagogical strategies within the Philippine context.

Keywords: Artificial Intelligence (AI), language learning, AI in education, ethical AI integration

INTRODUCTION

Teaching English as a second language is quite a challenging endeavor. Many people would like to learn English for academic pursuits, personal training, or professional obligations such as going abroad or to foreign countries. According to Hayati (2015), language is a tool of communication. As such, he emphasizes the importance of varied strategies in teaching English. One thing of note as well according to Su and Hsun (2005), is how the most effective method of teaching effective English language learners is to consider the classroom context, their perspective in English, their beliefs as well as the amenability to the tools, and learning materials that are used.

One of the key objectives of English language teaching, as highlighted by the Language and Child Development Center (2023), is to develop students' competence, confidence, and proficiency in using the language. To enhance global competitiveness and proficiency, it is imperative to consider adopting more contemporary and convenient methods of language instruction. Integrating modern technologies, such as Artificial Intelligence (AI), into language learning is one way to achieve this goal. Wang et al. (2020) emphasize that for AI technology in education to be effective, it must prioritize students' willingness to engage with it. Understanding students' perspectives allows for the creation of a framework that integrates AI tools into language education in a manner that aligns with learners' needs and preferences. This approach can enhance the effectiveness and inclusivity of AI in education in the Philippines, as researchers can develop a framework that is better suited to students' requirements.

As technology permeates the realm of teaching in numerous ways (Muttappallymyalil et al., 2016), the integration of technology into language teaching has been the subject of extensive

research, with numerous studies delving into its impacts on language learning outcomes, instructional methodologies, and student engagement. Moreover, the utilization of PowerPoint (Lucas, 2022) and Beamer presentations, podcasts, YouTube videos, various online and offline films, email, instant messaging chats, blogs, and learning management platforms like Canva (Felix, 2020). According to Felix (2020), this technological integration occurs through desktop computers, iPads, tablets, iPhones, smartphones, and the vast expanse of the internet of things.

Introduced by John McCarthy in the 1950s, Artificial Intelligence (AI) refers to the capacity of machines to imitate human intelligence. Today, AI has become a cornerstone of modern education, utilizing computational power to mimic human perception, decision-making, and problem-solving (Burns et al., 2023). Researchers such as Dodigovic (2005) have sought to replicate essential teacher qualities, including the systematic assessment of errors and the delivery of constructive feedback. Modern AI tools further support educational functions by monitoring student behavior and predicting academic performance (Koo, 2023; Khan et al., 2021). A notable example is 'The German Tutor,' developed by Heift and Schulze (2007), which utilizes an 'Error Priority Queue' to manage and remediate linguistic errors efficiently. However, while AI enhances language learning, significant concerns persist regarding its impact on student autonomy, creativity, and critical thinking (Lim, 2020).

This study investigates student perceptions regarding the application of Artificial Intelligence (AI) tools in language education. By exploring how Philippine learners engage with these technologies, the research seeks to inform a policy brief and develop an AI integration framework specifically tailored to the local educational context. Specifically, the study sought to identify perceptions of senior high school students A.Y. 2024-2025 on the use of artificial intelligence tools in language learning in terms of the following: AI as a virtual tutor, AI as an assistant for writing, AI as a study companion, AI as a creativity enhancer, and AI as a replacement for language teachers. It also determined a significant difference in the perception of senior high school students A.Y. 2024-2025 on the use of artificial intelligence tools in language learning in accordance with social status, sex, types of gadgets, and frequency of use. Ultimately, it aimed to create a policy brief that shall serve as a basis for crafting an AI integration framework for language learning in consideration of the findings on students' perception of the use of AI tools.

METHODOLOGY

The study used a quantitative approach, employing a descriptive-comparative and developmental design to gather objective, generalizable insights. The study was conducted at Saint Mary's University Senior High School in Bayombong and Murong National High School in Bagabag, Nueva Vizcaya. A researcher-made questionnaire, modeled after Buabbas et al. (2023), was used. The first part gathered demographic data, while the second part assessed perceptions using a five-point Likert scale across five sections: AI as a virtual tutor, assistant for writing, study companion, teacher replacement, and creativity enhancer. A binary question assessed opinions on AI replacing teachers. Reliability testing through a pilot study with 30 students from Bagabag National High School yielded acceptable Cronbach's alpha scores (0.707 to 0.774).

After obtaining approvals from the DepEd Division Office and school authorities, questionnaires were administered in a pen-and-paper format. Informed Consent Forms (ICFs) were provided, ensuring participants understood their voluntary participation. Confidentiality was maintained, and data was handled securely. Upon completion, all data was deleted.

Descriptive and inferential statistics were applied using SPSS (version 16). Means and standard deviations were calculated for descriptive analysis. A t-test and one-way ANOVA assessed significant differences in perceptions, ensuring normality and homogeneity assumptions were met.

The study protocols were reviewed and formally approved by the Saint Mary's University Research Ethics Office (SMU-REO) to ensure compliance with institutional and national ethical standards for human subject research.

RESULTS AND DISCUSSION

Section 1: Perceptions of Senior High School Students on the Use of AI

Table 1

Quantitative Description of AI as a Virtual Tutor as Deemed By Students

Statements	Mean	SD	QD
I feel comfortable asking questions and seeking help from AI language tutors	2.82	1.00	Neutral Perception
I believe human language tutors are more effective than AI in teaching languages	2.47	1.23	Moderately Negative Perception
I trust the counsel of AI in relation to grasping the concepts present in various language materials.	2.90	0.79	Neutral Perception
I believe AI can engage with my questions in the same manner as a human tutor.	3.05	1.07	Neutral Perception
I feel that AI is more active in my learning process, similar to a personal tutor.	3.08	0.93	Neutral Perception
I can trust AI to teach me in situations that a physical teacher cannot.	3.13	0.93	Neutral Perception
I trust that AI can provide me with reliable information and instruction	3.02	0.90	Neutral Perception
AI as a Virtual Tutor	2.92	0.61	Neutral Perception

Legend: 1.00-1.49 (Strong Negative Perception), 1.50-2.49 (Moderately Negative Perception), 2.50-3.49 (Neutral Perception), 3.50-4.49 (Moderately Positive Perception), 4.50-5.00 (Strong Positive Perception)

Table 1 reveals a neutral overall perception of AI as a virtual tutor (Mean = 2.92, SD = 0.61). Statements such as "I can trust AI to teach me in situations that a physical teacher cannot" (M= 3.13) and "I feel that AI is more active in my learning process, similar to a personal tutor" (M = 3.08) highlight students' moderate trust in AI for addressing accessibility and involvement in learning. Students appear to value AI's availability and reliability, particularly in situations where teachers are unavailable. However, responses such as "I believe human language tutors are more effective than AI in teaching languages" (M = 2.47) reflect skepticism about AI's ability to match human tutors' teaching efficacy. These findings suggest that while students see AI as a helpful complement to traditional teaching, they remain cautious about its overall effectiveness and depth of engagement compared to human educators.

The study of Wang et al. (2024) demonstrates how human-AI collaboration can scale real-time tutoring expertise by integrating live guidance features into virtual tutoring platforms. This approach combines AI's efficiency with educators' contextual knowledge, ensuring better instructional support and real-time interaction. Extending access to quality education, particularly in underserved areas, redefines learning by making high-quality tutoring more accessible and effective. Real-time personalized feedback on pronunciation, grammar, and vocabulary can be gained by learners when human-AI collaboration is integrated into multiple virtual tutoring platforms, and many benefits can be enjoyed through this collaboration. Teachers provide ethnic context and nuanced language understandings. At the same time, many AI systems enable instant error detection and plenty of practice opportunities. Many learners in resource-limited settings gain a better, more flexible learning experience with this hybrid approach

Table 2

Quantitative Description of AI as a Study Companion Deemed By Students

Statements	Mean	SD	QD
I think AI can supplement lapses in knowledge that Teachers cannot cover during the period.	3.04	0.96	Neutral Perception
I often use AI to explain the language concepts that I did not understand during discussions.	2.72	0.81	Neutral Perception

AI tools increase my motivation to learn a language by making studying more engaging and enjoyable	2.96	0.79	Neutral Perception
AI study companions help me stay organized and manage my study schedule.	3.06	0.79	Neutral Perception
AI study companions often provide irrelevant or unhelpful information	2.98	0.93	Neutral Perception
AI has an interface that is easier to navigate as compared to books.	2.58	1.00	Neutral Perception
I can use AI to learn a language without embarrassing myself as compared to speaking with someone else in another language	2.65	0.83	Neutral Perception
I am more comfortable communicating a new language to a nonhuman AI	3.00	0.81	Neutral Perception
AI as a Study Companion	2.87	0.49	Neutral Perception

Legend: 1.00-1.49 (Strong Negative Perception), 1.50-2.49 (Moderately Negative Perception), 2.50-3.49 (Neutral Perception), 3.50-4.49 (Moderately Positive Perception), 4.50-5.00 (Strong Positive Perception)

Table 2 shows that students exhibited neutral perceptions of AI as a study companion (mean = 2.87, SD = 0.49). Students rated items like “AI study companions help me stay organized and manage my study schedule” (mean = 3.06) and “AI can supplement lapses in knowledge that teachers cannot cover during the period” (Mean = 3.04) relatively higher. Students appreciate AI's utility for organizational tasks and as a supplementary knowledge source. However, lower ratings for items such as “AI has an interface that is easier to navigate as compared to books” (Mean = 2.58) indicate mixed perceptions regarding usability and effectiveness. While AI is seen as a useful organizational tool, improving its user interface and integrating it more seamlessly with existing educational practices could enhance its overall acceptance.

According to the study of Labadze et al. (2023), AI study companions boost academic outcomes by offering immediate support and tailored learning experiences. They foster motivation and self-efficacy, indirectly enhancing learning achievement. Chatbots, for instance, improve organization and facilitate accessible learning. AI study companions improve language acquisition. They provide immediate feedback. They offer personalized practice. They create adaptive learning pathways tailored to personal needs. Key factors in mastering a new language are built by their help in learners' motivation and self-efficacy. Many chatbots can effectively improve users' conversational practice and, importantly, improve their language organization skills. At the same time, they also provide many accessible learning resources at any time. Language learners find this approach engaging and effective because it encourages self-direction and provides the consistent practice they need.

Table 3

Quantitative Description of AI as an Assistant for Writing as Deemed By Students

Statements	Mean	SD	QD
AI helps me learn how to construct essays, speeches, etc.	2.72	1.18	Neutral Perception
AI tools save me time when it comes to proofreading and editing.	2.71	1.04	Neutral Perception
AI tools suggest relevant ideas and concepts to enhance my writing.	2.84	1.22	Neutral Perception
AI tools assist me in improving the clarity and coherence of my writing	2.68	1.08	Neutral Perception
AI tools often provide incorrect suggestions for grammar and style.	2.72	1.04	Neutral Perception
AI can sometimes suggest words I cannot understand.	2.60	1.17	Neutral Perception
The AI writes in a roundabout manner that makes it hard for non-English speakers to comprehend.	2.74	0.95	Neutral Perception
AI sometimes prompts inaccurate information to improve the written output.	2.71	0.95	Neutral Perception
AI deliberates over a mistake that I would not have made if I'm writing.	2.76	0.96	Neutral Perception

AI as an assistant for Writing	2.72	0.82	Neutral Perception
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Legend: 1.00-1.49 (Strong Negative Perception), 1.50-2.49 (Moderately Negative Perception), 2.50-3.49 (Neutral Perception), 3.50-4.49 (Moderately Positive Perception), 4.50-5.00 (Strong Positive Perception)

As gleaned in Table 3, students demonstrated a neutral perception toward AI as a writing assistant (mean = 2.72, SD = 0.82). Statements such as “AI tools assist me in improving the clarity and coherence of my writing” (mean = 2.68) and “AI tools often provide incorrect suggestions for grammar and style” (mean = 2.72) illustrate students’ concerns about AI’s reliability and accuracy. Students recognize AI’s potential to provide writing support, but they remain hesitant due to issues like incorrect suggestions and the complexity of AI-generated language for non-native speakers. Enhancing AI’s language accuracy and adapting it to diverse linguistic needs could improve perceptions of its value as a writing tool.

The neutral perception of Senior High School (SHS) students towards AI as an assistant for writing and a creativity enhancer might be attributed to several factors. According to Kazmi (2024), while AI tools aid in tasks such as grammar correction and content generation, they also raise concerns about inaccuracies and ethical issues like plagiarism, which necessitate cautious use. This cautious perspective may contribute to the neutral perception among SHS students. Additionally, the study highlights that AI tools are most effective when paired with critical engagement by users, suggesting that students may not fully perceive the benefits of AI in enhancing creativity if they view these tools primarily as technical aids rather than as tools that can enhance creative processes. Therefore, the neutral perception could stem from a combination of limited awareness about the full range of AI capabilities and concerns about ethical usage, which may overshadow their potential as creativity enhancers.

Table 4

Quantitative Description of AI as Creativity Enhancer as Deemed By Students

Statements	Mean	SD	QD
AI tools can give me new ideas I might not have thought of.	2.53	1.22	Neutral Perception
AI tools can make it harder for me to think of my ideas	3.05	1.00	Neutral Perception
AI tools can help me find more creative solutions to problems.	2.94	1.06	Neutral Perception
AI tools tend to repeat ideas that already exist instead of creating new ones	2.58	1.01	Neutral Perception
AI is useful for helping me practice and improve my creative thinking.	2.79	0.91	Neutral Perception
AI can suggest very unique and different ideas.	2.67	1.04	Neutral Perception
AI ideas can be too common for what I like.	2.67	0.98	Neutral Perception
AI can help me guess what might happen with my ideas.	2.96	1.01	Neutral Perception
AI can help me express my thoughts and ideas clearly	3.02	1.09	Neutral Perception
AI will take over human creativity and become the future of art, music, and entertainment	3.14	1.29	Neutral Perception
AI as a Creativity Enhancer	2.83	0.70	Neutral Perception

Legend: 1.00-1.49 (Strong Negative Perception), 1.50-2.49 (Moderately Negative Perception), 2.50-3.49 (Neutral Perception), 3.50-4.49 (Moderately Positive Perception), 4.50-5.00 (Strong Positive Perception)

The table shows that perceptions of AI as a creativity enhancer were also neutral (Mean = 2.83, SD = 0.70). Statements such as “AI will take over human creativity and become the future of art, music, and entertainment” (Mean = 3.14) show optimism about AI’s role in creative fields, while items like “AI tools tend to repeat ideas that already exist” (Mean = 2.58) highlight concerns about originality. Students acknowledge AI’s potential for idea generation and creative problem-solving, but they also note its tendency to lack originality. To improve perceptions of AI

as a creativity enhancer, efforts should focus on enabling AI to generate unique, context-specific ideas and solutions.

According to Jia and Tu (2024), generative AI supports creativity by generating diverse ideas and facilitating brainstorming. However, limitations in originality highlight the need for critical interaction with AI-generated outputs to optimize creative thinking. It is where generative AI can assist learners in generating more and more ideas and conducting brainstorming sessions to help them out of writer's block and broaden their creative scope. However, the constraints on AI originality underline the significance of critical interaction with AI-generated outputs. This requires learners to critically assess and refine these ideas so they are real and unique — challenges that evoke critical, creative thought while also leading to increased mastery of language.

Table 5

Quantitative Description of AI as a Replacement for Teachers as Deemed by Students

Questions	Yes		No	
	f	%	f	%
Can AI explain lessons better than your teacher?	40	12.2 3	287	87.7 7
Do you prefer using AI to help you learn instead of a teacher?	13	3.98	314	96.0 2
Do you trust AI more than your teacher to help with your homework?	46	14.0 7	281	85.9 3
Do you think AI can take the place of teachers in the classroom?	35	10.7 0	292	89.3 0
Are teachers better at answering difficult questions and having discussions than AI?	183	55.9 6	144	44.0 4
Is AI as valuable as a real teacher?	110	33.6 4	217	66.3 6
Do you see AI as a tool rather than a teacher?	226	69.1 1	101	30.8 9
Can AI check your work for plagiarism better than your teachers?	146	44.6 5	181	55.3 5
Is AI more personalized and interactive than your teachers?	75	22.9 4	252	77.0 6
Do you think AI will replace teachers in the future?	78	23.8 5	249	76.1 5

Legend: 1.00-1.49 (Strong Negative Perception), 1.50-2.49 (Moderately Negative Perception), 2.50-3.49 (Neutral Perception), 3.50-4.49 (Moderately Positive Perception), 4.50-5.00 (Strong Positive Perception)

Table 5 shows that senior high school students perceive AI as a tool rather than a replacement for teachers, with 69.11% agreeing that AI serves as a complement rather than a substitute for human educators. Most students believe teachers are better at explaining lessons (87.77%), answering difficult questions, and facilitating discussions (55.96%). While some acknowledge AI's value in specific tasks like checking for plagiarism (44.65%), the majority (76.15%) do not think AI will replace teachers in the future. AI cannot replicate the personal connection and empathy that teachers provide, as it involves understanding the individual needs and emotions of students, building relationships, and adapting teaching methods to encourage a more engaging and personalized learning experience. This human element is crucial for fostering a supportive learning environment that encourages student growth and development, making teachers irreplaceable in the educational process.

The study by Kazmi (2024) stated that AI complements rather than replaces teachers by automating tasks and providing scalable learning support. Its inability to replicate human empathy and adaptability underscores the importance of collaboration between AI tools and educators. AI tools can serve as complements to educators by automating rote work, such as grading and basic feedback, and providing scalable support for language practice. However, the fact that AI can never mimic human emotion and adaptability draws a clear line of where we need to work together. Teachers are needed to deliver the context and emotional connection

needed for learning a language well. At the same time, AI can make the skills more efficient and easier to access. This collaboration creates a better, balanced, and supportive learning system.

Section 2. Comparison of Student Perceptions of the Use of AI

Table 6

Comparison of Students' Perception of the Use of AI in Terms of Social Status

Groups	f (n=327)	Mean	SD	QD	F-value	p-value
Poor	31	2.70 ^B	0.36	Neutral Perception	5.384***	0.001
Low-income but not poor	62	2.72 ^B	0.72	Neutral Perception		
Lower Middle	86	2.82 ^B	0.47	Neutral Perception		
Middle	88	3.06 ^A	0.64	Neutral Perception		
Upper Middle	42	2.59 ^B	0.40	Neutral Perception		
Upper Middle but not Rich	18	2.98 ^A	0.60	Neutral Perception		

Legend: 1.00-1.49 (Strong Negative Perception), 1.50-2.49 (Moderately Negative Perception), 2.50-3.49 (Neutral Perception), 3.50-4.49 (Moderately Positive Perception), 4.50-5.00 (Strong Positive Perception), ns- not significant Mean groups who do not share a common letter are significantly different from each other.

The table shows that social status influences students' perceptions of AI use. Students in the "Poor" group had the lowest mean score (2.70), indicating a more cautious view of AI tools, with minimal variation (SD = 0.36). The "Low-income but not Poor" group had a slightly higher mean (2.72), still neutral but with more variability (SD = 0.72). The "Lower Middle" group showed a more positive neutral view (mean = 2.82, SD = 0.47). The "Middle" group had the highest mean (3.06), suggesting a more favorable view, though with some variability (SD = 0.64). The "Upper Middle" group exhibited the lowest mean (2.59), reflecting skepticism, with a consistent view (SD = 0.40). In contrast, the "Upper Middle but not Rich" group had a mean score of 2.98, showing a neutral-to-positive perception with moderate variability (SD = 0.60). As for the mean groupings, the "B" group containing "Poor," "Low-income but not poor," "Lower Middle," and "Upper Middle" have no significant difference from one another; on the other hand, group A containing "Middle" and "Upper Middle but not Rich" are significantly different with those of group B. Despite these differences, the mean scores still fall under the "Neutral Perception" category. These findings underscore the need for inclusive educational policies that address the digital divide and promote equitable access to AI tools, emphasizing its supportive role alongside human teachers.

These differences can be attributed to factors such as access to technology, digital literacy, and socio-economic conditions. Higher social status groups, like "Middle" and "Upper Middle but not Rich," generally had more favorable perceptions, likely due to better access to technology and more exposure to AI tools. In contrast, lower social status groups, such as "Poor" and "Low-income but not Poor," were more cautious, likely due to limited access and fewer digital learning resources. This aligns with Afzal et al. (2023), which found that those in lower socio-economic statuses are more skeptical of AI due to limited internet access. Similarly, Fountaine et al. (2019) noted that broader cultural factors influence organizational acceptance of AI. Still, the results challenge the idea that the upper-middle class embraces AI more positively, as the "Middle" group showed higher acceptance than the "Upper-middle group. Accessibility to technology and digital literacy do much to influence learners' attitudes toward AI language tools. Learners from better socio-economic backgrounds with greater exposure to technology are likely to embrace AI for personalized practice and more interactive learning experiences.

In contrast, poor accessibility and mistrust among the lower socio-economic groups may impede the adoption of AI and thus persist in educational inequities. This gap can be bridged by prioritizing equitable access to technology and targeted digital literacy programs in language learning initiatives. Additionally, cultural perceptions need to be addressed, and AI tools need to

be tailored to meet the needs of diverse learners for greater acceptance and effectiveness across socio-economic boundaries.

Table 7*Comparison of Students' Perception of the Use of AI in Terms of Sex*

Groups	f (n=327)	Mean	SD	QD	t-value	p-value
Male	148	2.81	0.66	Neutral Perception	0.520 ^{ns}	0.603
Female	179	2.85	0.52	Neutral Perception		

Legend: 1.00-1.49 (Strong Negative Perception), 1.50-2.49 (Moderately Negative Perception), 2.50-3.49 (Neutral Perception), 3.50-4.49 (Moderately Positive Perception), 4.50-5.00 (Strong Positive Perception), ns- not significant

The table shows that the male students reported an average perception score of 2.81, which falls within the "Neutral Perception" range (2.50-3.49), meaning that, on average, they neither strongly support nor oppose AI use. The standard deviation (SD) of 0.66 indicates moderate variability in their views. Female students, with a mean score of 2.85, also fall within the "Neutral Perception" range. However, their SD of 0.52 suggests a more consistent perception compared to the male group. The t-test results, showing a t-value of 0.520 and a p-value of 0.603, indicate no statistically significant difference in perceptions between male and female students, as the p-value exceeds the usual threshold of 0.05. This suggests that both groups share a similar neutral view on AI, indicating that sex does not significantly influence students' attitudes toward AI.

The findings suggest that male and female students hold similar, neutral perceptions of AI, with no significant differences between the two groups. This challenges the assumption that sex plays a major role in shaping students' perceptions of AI use. Both groups show moderate, neutral attitudes toward AI, undermining the idea of a sex divide in perceptions of emerging technologies like AI. This result also challenges the widely accepted view of a digital sex inequality cycle, which is often tied to the intersection of sex and work, particularly in STEM fields. Although girls and boys show comparable interest in STEM subjects in primary school (UNESCO, 2019), their interests tend to diverge later in education, with girls often choosing humanities and social sciences while boys lean towards computer science and engineering. Nonetheless, this study's results suggest that female respondents have either the same or a slightly more positive perception of AI compared to their male counterparts. The similar, neutral perceptions of AI among male and female students suggest that gender does not significantly influence attitudes toward AI-based language tools. This negates stereotypes of a digital sex divide, which suggests that both groups are equally open to adopting AI for learning purposes. For language learning, this neutrality provides an opportunity to design AI tools that cater to diverse learners without needing gender-specific adjustments. Additionally, developing an equal interest in using AI-powered language technologies among students can stimulate gender-balanced student participation in technology during learning, ultimately leading to more equitable and inclusive learning outcomes.

Table 8*Comparison of Students' Perception of the Use of AI in Terms of Types of Gadgets*

Groups	f (n=327)	Mean	SD	QD	F-value	p-value
Laptop only, Tablet only, Others	9	2.55 ^B	0.60	Neutral Perception	37.097 ^{**} *	0.001
Mobile phone only	92	2.57 ^B	0.36	Neutral Perception		
Laptop and Tablet	16	4.14 ^A	0.43	Moderately Positive Perception		
Laptop and Mobile phone	113	2.80 ^B	0.62	Neutral Perception		
Laptop, Tablet, and Mobile phone	97	2.87 ^B	0.40	Neutral Perception		

Legend: 1.00-1.49 (Strong Negative Perception), 1.50-2.49 (Moderately Negative Perception), 2.50-3.49 (Neutral Perception), 3.50-4.49 (Moderately Positive Perception), 4.50-5.00 (Strong Positive Perception), *** significant at $\alpha=0.001$ Mean groups who do not share a common letter are significantly different from each other.

The table shows that there is no significant difference based on the standard deviation between each item being relatively low. The descriptive statistics on the table showcase that the group of laptops and tablets have the most positive perception towards AI, having a moderately positive perception (Mean = 4.14, SD = 0.43), while groups consisting of the use of only one gadget (Laptop only, tablet only, others) shows the lowest mean (Mean = 2.55, SD = 0.60) which is still in the range of a neutral perspective based on the established qualitative statistic. Likewise, for the mean grouping, there are two that can be seen on the table, namely mean group "A" consisting only of "Laptop and Tablet" and "B," which contains "Laptop only, Tablet only, Others," "Mobile phone only," "Laptop and Mobile phone," "Laptop, Tablet, and Mobile phone". Those clustered in "B" are not significantly different from one another, while "A" is significantly different from the "B" group.

The results reveal that laptop and tablet users have the most positive reactions, which implies that this group would be most positively inclined towards AI as compared to the other groups. The moderately positive perspective on AI in this group can be supported by a recent study by Chan et al. (2023) which found that higher education students generally perceive the potential benefits of AI. It can also be noted that the group of laptops and tablets have more exposure to AI technology in the form of virtual assistants, most commonly Siri for tablet users and Cortana for laptop users. In a study conducted by Fayed et al. (2013), tablet users often utilize the virtual assistance intelligence in their devices to support and increase the ease of autonomy when using this form of technology. Another factor that can be interpreted from the post hoc results is that most of the groups have a neutral stance on AI, which can be connected to a statement by Chomsky stated during an interview with *Radyo Katipunan* (2022) en quote, "As far as technology itself and education is concerned, technology is basically neutral."

With this, language teachers feel that the success of AI for language learners depends more on its introduction and use. Accessibility should be ensured to the maximum, online literacy encouraged, and, most importantly, practical benefits through AI should be shown in language acquisition contexts. For example, training on AI tools for targeted use by less engaged groups may ease hesitation and enhance support for more inclusive technology use in language education.

Table 9

Comparison of Students' Perceptions of the Use of AI in Terms of Frequency of Use

Groups	f (n=327)	Mean	SD	QD	F-value	p-value
Rarely	38	2.88	0.26	Neutral Perception		
Often	153	2.81	0.59	Neutral Perception	0.254 ^{ns}	0.776
Most of the time	136	2.84	0.64	Neutral Perception		

Legend: 1.00-1.49 (Strong Negative Perception), 1.50-2.49 (Moderately Negative Perception), 2.50-3.49 (Neutral Perception), 3.50-4.49 (Moderately Positive Perception), 4.50-5.00 (Strong Positive Perception), ns- not significant

The table above illustrates that the ANOVA results showed little variance between the individual groups, having a relatively low F-value ($F=0.254$, $p=0.776$). This is supported further by the not-so-significant difference between the mean and standard deviation for the items presented, with the highest deviation being for the group "most of the time" ($sd=0.64$, $m=2.84$). The lowest value being "rarely" ($sd=0.26$, $m=2.88$). Overall, the implication post hoc of this test is that there is no significant effect on the frequency of gadget use on the respondent's overall perception of AI. Surprisingly, this data goes against the usual results when it comes to the correlation between gadget use and perception in AI.

Garrel and Mayer (2023) found that the more frequently a student uses technology, the more likely they would have come across and used AI, leading to a more positive perception of it.

Khalifa and Albhadawy (2024) also mention that those in higher education levels who are frequent users of gadgets often say that AI is a revolutionary tool that is available for their disposal due to its ability to manage complex and extensive information necessary for learning. This can be interpreted as a generally positive perception towards the technology by frequent users. Meanwhile, a possible explanation for the test scoring neutral all around the board can be found in the study of Maness et al. (2018) regarding a purely neutral response on a Likert-based scale where it is mentioned that unfamiliarity with the concepts listed within a test may lead to an increase in neutral answers.

The post hoc results suggest that because AI is a relatively new and niche concept in the academic context, students' perceptions may not yet be fully formed. While the respondents are frequent gadget users, their digital activity is often centered on social media platforms like YouTube, TikTok, and Snapchat (Vogels et al., 2022). On these sites, AI operates primarily as a background algorithm for content recommendations and advertisements rather than as a visible, interactive tool for learning. Consequently, students may interact with AI daily without recognizing it as such, leading to the neutral perceptions recorded on the Likert-based scale as noted by Maness et al. (2018).

Overall, it can be inferred that depending on the group or categorization, there can be little to no significant differences in terms of the perceptions among groups. This means that the null hypothesis of the study can be generally accepted.

Section 3. Policy Brief as Basis for AI Integration in Language Learning

The respondents' generally neutral perceptions, reflected in middle-point averages, with only one moderately positive and one moderately negative view, can be attributed to various factors. These include a lack of awareness about AI's advantages and disadvantages, as observed by Dergunova et al. (2022), and the absence of clear guidelines, emphasizing the need for relevant policies (Cardona et al., 2023).

The data revealed neutral perceptions across five areas: AI as a virtual tutor, writing assistant, study companion, creativity enhancer, and replacement for language teachers. This neutrality underscores the importance of fostering a deeper understanding of AI to help users form more informed and aligned views on its applications. While respondents generally exhibited neutral perceptions of AI in education, the moderately positive outlook in certain areas contrasts with the moderately negative perception of AI as a virtual tutor. This skepticism toward AI as a tutor aligns with Pizzi et al.'s (2020) findings, which highlight challenges in leveraging AI for personalized learning experiences. The study concluded that while AI holds promise as a supplementary tool, addressing issues of trust, ethics, and implementation is critical for improving its acceptance and effectiveness in educational settings. Consequently, this study highlights the need for a policy brief and corresponding policies.

The study included a policy brief (see Appendix Q) and a policy (see Appendix R) derived from the *Principles for Responsible and Trustworthy Artificial Intelligence* by the University of the Philippines, providing guidelines for the responsible and effective use of AI in language learning. According to the International Development Research Centre (2021), a policy brief is a concise document that provides evidence-based recommendations on a specific issue. The policy brief in this study emphasizes the potential applications of AI in language learning, considering the five identified perceptions. It also underscores the importance of educators adopting an open-minded yet responsible approach to integrating AI into education.

The policy brief begins with an introduction to AI and its applications in language learning, outlining its advantages, disadvantages, and related concerns that educators and administrators must address. It also includes a summary of the problems, key findings, and implications, followed by actionable recommendations to guide the use of AI in this context.

A collection of international policy briefs summarized by Sakvar et al. (2021) highlights diverse applications of AI, including its role in education, healthcare, and supply chain management, emphasizing the need for an enabling policy framework. However, the policy brief in this study contributes a unique perspective by focusing on students' perceptions of AI in language learning.

The accompanying policy ensures the ethical and fair use of AI tools, aligning with principles of academic integrity, data privacy, and equitable access for all students. This policy applies to students, teachers, administrators, and staff in Region 2 Senior High Schools who use AI tools for language learning. To bridge the gap in understanding AI, workshops should be conducted for both students and educators. These training sessions should highlight AI's strengths, such as providing instant feedback, personalizing learning experiences, and fostering creativity while also clarifying its limitations. For instance, Kazmi (2024) emphasizes the importance of critical engagement to prevent over-reliance on AI, particularly for writing tasks. Similarly, Sumakul et al. (2021) and Pham et al. (2023) discuss how AI tools can enhance clarity, coherence, and efficiency in writing, reinforcing their role as valuable supplementary tools. Clear guidelines must be established to ensure the ethical use of AI tools, particularly in safeguarding data privacy, upholding academic integrity, and promoting equitable access. Policies should emphasize AI's complementary role in education, ensuring it is not misused as a standalone solution for complex teaching tasks. Wang et al. (2024) and Hartono et al. (2023) advocate for balanced AI-human collaboration to preserve meaningful teacher-student interactions. Regular assessments of AI tools should be conducted to measure their effectiveness in achieving educational outcomes. Feedback from students and educators must be integrated into ongoing refinements to ensure alignment with curricular goals. Studies by Ahmad et al. (2021) demonstrate how adaptive evaluation mechanisms can enhance AI's role as a virtual tutor, particularly in underserved areas where accessibility is critical. To build trust and confidence in AI tools, awareness campaigns should be launched to highlight their benefits and limitations. Showcasing successful use cases can illustrate AI's potential to enhance learning outcomes. Sastre et al. (2022), Jia and Tu (2024) emphasize how promoting AI's role in fostering creativity and problem-solving can increase its acceptance in educational settings. Awareness initiatives should also address misconceptions, helping stakeholders develop a balanced understanding of AI's role in language learning.

Conclusion

Since the perceptions of senior high school students on the use of AI are found to be in the midpoint or neutral, it can be deduced that there is no positive nor negative perception of AI for language learning. It may be due to different factors, considering the different advantages and disadvantages of AI. However, since the data are purely quantitative, descriptive specifically, the need for qualitative data responses from the respondents may supply better information on the neutral response.

Given the minimal to no significant differences observed across variables such as sex, social status, types of gadgets, and frequency of use, it can be inferred that the perceptions of AI tools in language learning are relatively consistent among students. This consistency suggests that the findings regarding students' perceptions of AI can serve as a valuable foundation for formulating generalized policies and guidelines for the implementation of AI in educational settings. Such policies can be broadly applicable, ensuring equitable access to AI tools and effectively integrating them into language learning without bias towards specific demographic factors.

These results point to a need for the education or promotion of awareness in the proper use of AI in language learning to benefit from it is essential through the policy brief crafted.

Recommendations

Given the following conclusions deduced from the results of the study, the study recommends the following that an AI awareness drive be conducted for all students and teachers to support their perception of AI's advantages and disadvantages as a tool for language learning. Also, consideration of AI used for language learning can be embedded and aligned with educational institutions' guidelines for academic purposes. This means that since a policy brief will be contributory to the study, educators' need to consider AI in learning must be reflected in their institutional guidelines and policies. Moreover, a qualitative study that will better support the data of the study, particularly on other AI perceptions, and on why the perception is generally neutral, considering the same variables involved in the study and other possible variables such as age, AI awareness, and the like. Active student engagement with AI tools should also be encouraged, promoting a critical evaluation of their benefits and limitations. Students should advocate for the integration of AI into their learning environments to ensure that these tools effectively complement traditional educational methods and contribute to enhanced learning experiences. For educators, they should integrate AI tools into their teaching practices by aligning them with institutional guidelines. This approach involves fostering a balanced perspective on the role of AI in education, emphasizing its potential to enhance learning while recognizing its limitations relative to human teaching. Meanwhile, curriculum developers should create educational materials that incorporate AI, ensuring they align with both the capabilities of AI and the diverse learning needs of students. These materials should provide opportunities for meaningful interaction with AI, supporting students' academic growth and engagement. Finally, for administrators, they should support the integration of AI into academic policies by providing the necessary resources and training for educators and students. Implementing policies that facilitate the effective use of AI in education will ensure that AI tools are fully utilized to enhance learning outcomes and contribute to overall educational quality.

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