

Using Artificial Intelligence Tool in Studying English Skills in Vietnam – An Experimental Research for Vietnamese High School Students

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Abstract

Artificial Intelligence tools such as Grammarly and ChatGPT are used in the learning process, including learning foreign languages for high school students. This paper aims to synthesize the benefits and limitations of using AI in learning foreign languages, and the current situation of using AI tools in studying English for high school students in Vietnam. The authors have systematized theories about the benefits and limitations of using AI tools in learning English in about 30 papers in peer-reviewed journals from 2018 to 2024. The authors developed a survey to collect data from 300 students in high school at Hanoi in Vietnam to see and know the current status of using AI tools in learning English. The results of data analysis from 297 responses calculated the AI usage situation as follows: Using AI tools in studying English students is very common with a high frequency of use including four skills listening, speaking, reading, and writing. Most of the students are also well aware of the benefits and limitations of AI tools. However, students' use of AI tools is still spontaneous and not supported by teachers and schools. To better use AI for students' English learning, the article makes recommendations to schools and teachers.

Keywords: *AI Tools, AI Applications, Study English, Learning Skills.*

Introduction

Artificial Intelligence technology is considered one of the leading important technology industries, helping people solve many tasks. Artificial intelligence (AI) was born in the 1950s and AI applications in social life areas have developed strongly since the early 2000s. AI is the simulation of human intellectual processes by machines, especially computer systems, so it can enable individuals to better understand their environment and act accordingly. Many organizations are already adopting AI technologies to adapt or disrupt their ecosystems while growing and optimizing their strategic and competitive advantage. AI demonstrates its full potential through its ability to optimize existing processes and improve automation, information, and transformation effects while detecting, predicting, and interacting with humans. Many organizations believe that AI will be a tool to help improve their competitiveness, capital, and innovation (Haroon Sheikh, Corien Prins, & Erik Schrijvers, 2023). The application of AI has become a new trend in all aspects of human economic and social life

In the field of education, AI tools are revolutionizing the educational management, teaching, learning, and research activities of schools, students, and teachers (Şahin Gökçearsan, Cansel Tosun, Zeynep Gizem Erdemir, 2024). Artificial intelligence in education is the use of AI tools to improve teacher teaching and student learning. The advantages of AI for learners are developing language skills, and developing learning motivation while the limitations are interaction, incorrect answers, and plagiarism (Şahin Gökçearsan, Cansel Tosun, Zeynep Gizem Erdemir, 2024). AI provides personalized learning experiences, enhances knowledge access, and self-learning for learners, and attracts the attention of educational managers

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(Krishnamurthy & Sandeep, 2020). AI has affected to education activities and brought many new opportunities for teaching and learning (Do The Duong, Hoang Dieu Linh, 2023).

In language teaching, teachers, learners, and educational administrators have been constantly searching for effective methods to impart language skills. AI has proven itself to be a useful and groundbreaking tool for many things, including language learning, and has proven to be an invaluable asset for learners, especially for learning English (Enik Rukiati, Julien Arief Wicaksono, Gullit Tornado Taufan, Degita Danur Suharsono, 2023). Many AI tools such as Grammarly, and Google Translate... have been popularly used by learners to practice English listening, speaking, reading, and writing skills (Tran Thi Thu Hien, 2024). Author (Ho Nguyen, 2024) have acknowledged the positive impact of AI tools on the self-learning process of English in university students.

AI supports the ability to improve learners' pronunciation skills using speech recognition technologies, practice listening skills by interacting with AI, and receive instant feedback on pronunciation, AI helps learners better understand and remember language concepts (Enik Rukiati, Julien Arief Wicaksono, Gullit Tornado Taufan, Degita Danur Suharsono, 2023). AI brings significant improvements to foreign language learning but also raises some challenges such as copying and violating scientific ethics (Dian Toar Y. G. Sumakul, Fuad Abdul Hamied & Didi Sukyadd, 2021) (Enik Rukiati, Julien Arief Wicaksono, Gullit Tornado Taufan, Degita Danur Suharsono, 2023), (Tran Thi Thu Hien, 2024). The impact of AI on language learning and teaching covers many aspects, bringing both opportunities and challenges for teachers, learners, and schools.

In Vietnam, learning English is highly emphasized at all levels of popular education, university, and postgraduate levels, not only because English is an important international language but the need to learn English is extremely important for examination, admission, and recruitment purposes (Tran Thi Thu Hien, 2024), (Tran Tin Nghi, Tran Huu Phuc, Nguyen Tat Thang, 2019). Vietnam has about one million students studying in senior high school every year. The number of high school students is about three million. Vietnam has a fairly developed ICT & Internet infrastructure, and smartphones and cheap computers have been popularized, most Vietnamese students have the opportunity to use computers and phones connected to the Internet from a very early age. This is also an opportunity for Vietnamese students to use AI tools in learning. This research article presents the current situation of using AI tools in learning English as a foreign language for students in Vietnam in terms of benefits, and limitations, and recommends solutions for using AI effectively in learning English for students.

Basic Concepts

The Role of English and Learning English

English plays an important role in people's learning, work, communication, and social life. English is the main language of communication globally in all fields, politics, economics, commerce, culture, science, education, and tourism, including online communication. Most people who are fluent in English have high opportunities to find jobs and integrate internationally, becoming global citizens (M.Samanth Reddy, 2016).

Among the 6500 languages used in the world today, English is widely used and taught in more than 118 countries, is an official language in 53 countries, and is used by about 400 million people worldwide as a first language. According to the British Council (2020), about two billion people around the world are learning English, accounting for about 20%-25% of the global population. In the World Wide Web alone, it is estimated that 52% of websites in English are visited by about 550 to 600 million people daily. English, whether used for any purpose, whether for study, work, or entertainment, is really important. It is a medium of international communication both in the real world and the electronic world. Therefore, learning English is an urgent human need in the current context of deep global integration (Rajathurai Nishanthi, 2018).

According to the British Council, learning English is language learning, meaning learners must learn speaking, listening, reading, and writing skills and the language system includes vocabulary, grammar, pronunciation, and discourse. Learners can be students, students, candidates, or workers studying for

different purposes. Learning English can be done under the guidance of teachers at training facilities, or self-study with the support of other means such as books, dictionaries, tapes, computers, and media. English is a mandatory subject at many educational levels. In general, the goal of the learner is to master the four skills of listening, speaking, reading, and writing, and depending on the level of education, these four skills are used to evaluate the learner's level to meet exam requirements of schools, or recruitment requirements of employing units and organizations.

AI Definitions and AI Applications

AI stands for Artificial Intelligence is a branch of the field of computer science, related to the development of computer programs to complete demanding tasks. human intelligence. AI is intelligence created by human programming to help computers automate intelligent behaviors like humans. AI is defined in a broad and narrow sense. In the broadest definition, AI is synonymous with algorithms, while in the narrowest definition, AI stands for the imitation of inherent human intelligence by computers. Defining AI as technology that allows machines to imitate various complex human skills, (Haroon Sheikh, Corien Prins, & Erik Schrijvers, 2023), AI are systems that exhibit intelligent behavior by analyzing their environment and taking action – with a certain degree of autonomy – to achieve specific goals (European Commission's 2018). Artificial Intelligence (AI) covers various fields like Natural Language Processing (NLP), Computer Vision (CV), Machine Learning (ML), Deep Learning (DL), Robotics, and more.

As such, AI refers to systems that exhibit intelligent behavior by analyzing their environment and taking actions – with a certain degree of autonomy – to achieve specific goals. AI-based systems can be entirely software-based, operating in virtual worlds (e.g., ChatGPT, voice assistants, image analysis software, search engines, face, and speech recognition systems) or AI can be embedded in hardware devices (e.g. advanced robots, autonomous cars, drones or Internet of Things applications).

AI applications span many industries, including healthcare, education, finance, logistics, and government.

The application of AI is not simply copying or simulating human capabilities but also opens up great potential in solving complex problems and improving the quality of human life. However, there are also challenges and concerns about the proper use of artificial intelligence and ensuring safety for society and people. The generative artificial intelligence (AI) market is expected to grow significantly, from US\$11 billion in 2020 to nearly US\$128 billion in 2024 and over US\$1.3 trillion in 2032 (Statista, 2024).

AI Applications in Learning English

Applying AI in learning English listening: Artificial intelligence meets the increasingly high and modern learning needs, changing the education of the times. AI helps learners improve their writing skills. There are many AI tools used in learning English skills of listening, speaking, reading, and writing. AI supports learners in writing and correcting spelling, grammar, and comma errors. The author (Tira Nur Fitria, 2021) believes that AI helps English learners improve the quality of articles and correct grammar errors. Using AI tools, learners can improve their English essay writing ability (Shireen Mostafa Ahmed Abdalkader, 2022) (Shireen Mostafa Ahmed Abdalkader, 2022). The authors (Rizky Vita Losi, Eka Putra Putra, Nurbaiti Ali, Adinda Silvana Dewi, 2024), emphasized the benefits of AI technologies to help learners write English essays, while also developing their ability to self-study. AI tools used to support writing skills such as Grammarly, Writesonic, and Wordtune... have their advantages, suitable for the field of social science or natural science, but they all have in common helping learners discover or correct spelling errors, grammatical errors, or support editing attractive content. Learners can use AI tools to support writing skills with suggestions to correct grammar and spelling errors and improve style, but it should primarily rely on the learner's ability (Godwin-Jones, R, 2022). In other words, AI supports learners in writing English but has limitations in semantic and content accuracy (Lasha Labadze, Maya Grigolia & Lela Machaidze, 2023).

Applying AI in learning English speaking skills: The authors (E. Madhavi, Lavanya Sivapurapu, Vijayakumar Koppula, P. B. Esther Rani, Vemugant Sreehar, 2023) (E. Madhavi, Lavanya Sivapurapu, Vijayakumar Koppula, P. B. Esther Rani, Vemugant Sreehar, 2023) conducted a study with 100 students which was

divided into two groups, the group learning English for non-IT professionals and the group learning English for IT professionals. Compared with the non-IT professional group using the speaking learning method without AI support and the group of IT professionals using AI to learn to speak, the group of IT majors showed superior performance in all test parameters speaking. AI tools contribute significantly to progress in learning speaking skills. Another study on using AI to practice academic English speaking skills researched by (Zou, B, Liviero, S. Hao, M. Y. & Wei, C. Y, 2020) (Zou, B, Liviero, S. Hao, M. Y. & Wei, C. Y, 2020) showed that learners preferred and satisfied with AI tools for speaking development due to lack of teacher feedback.

Learners also noticed some limitations in current AI tools such as the lack of different voices for learners to improve their speaking skills. AI tools support learners but cannot replace teachers. Research by (Cristhian Joel Lucas Soledispa, Paola Nathaly Mantilla Carrera, Araceli Maritza Dávila Macías, Luisa Fernanda Jaramillo Crespo, Diego Omar Armijos Solano *Ciencia Latina Revista Científica*, 2024) (Cristhian Joel Lucas Soledispa, Paola Nathaly Mantilla Carrera, Araceli Maritza Dávila Macías, Luisa Fernanda Jaramillo Crespo, Diego Omar Armijos Solano *Ciencia Latina Revista Científica*, 2024) has emphasized the technological aspect of AI tools that need to be perfected so that learners who practice their speaking skills can achieve higher levels of fluency and accuracy.

Applying AI in learning English listening skills: Authors (Suryana, I., Asrianto., & Murwantono, D, 2020) conducted a survey at the Department of Psychology of Sarjanawiyata University and presented results on effective AI mobile applications to improve listening skills, and the most effective way to improve English listening skills is to use Netflix. A study conducted by (Nguyen Thi Lam, 2023) aimed to investigate how AI applications are supported on mobile devices for English listening learners. The author implemented a teaching method for two months for learners to use AI tools to practice listening skills via mobile devices in class and at home. Research has found that using AI has improved learners' listening abilities. A study has also recognized that AI can help English learners with listening and speaking skills, enhancing learners' communication skills (Cristhian Joel Lucas Soledispa, Paola Nathaly Mantilla Carrera, Araceli Maritza Dávila Macías, Luisa Fernanda Jaramillo Crespo, Diego Omar Armijos Solano *Ciencia Latina Revista Científica*, 2024).

Applying AI in learning English reading skills: AI supports learners with English reading skills. Reading skills play an important role for English learners. The ability to read and understand documents is an important skill for learners to be able to take tests and practice professionally, reducing errors and negatively affecting learning outcomes. The author (Muhamad Taufik Hidayat, 2024) evaluated the reading comprehension support and effectiveness of an AI-based personalized reading platform for high school students. Based on a pilot study with 43 students using AI and 42 students without using AI, reading level tests were used to evaluate these two groups of students before and after the experiment. Statistical analysis results showed that the group of 43 students using the AI-based platform had significantly higher reading comprehension scores than the group of 42 students who did not use AI. Research by (Muhamad Taufik Hidayat, 2024) shows that AI has effectively improved reading comprehension. According to (Dessy Rizky Nuraini Herawati, WiwikWidajati, Endang Pudjiastuti Sartinah, 2022). AI tools have vocabulary definition and explanation features, and text-to-speech features that can help readers practice listening and speaking skills. Research by (Sri Lestari, Wahyuningsih Usadiati & Misrita, 2021) found a correlation between AI use and English reading skill achievement of students at Kalimantan University. The authors found a correlation between the variable using AI and the variable of students' English reading results with a correlation coefficient of 0.67. The authors have concluded that the relationship between the variable using AI and the variable reading English is significant. AI tools have features to score reading skills and evaluate reading skills, through which learners know their strengths and weaknesses (Xinyi Huang, Di Zou, Gary Cheng, Xieling Chen, and Haoran Xie, 2023).

Table 1 summarizes research on the benefits and limitations of AI applications in learning English. It is worth noting that because the studies use many words to express the benefits or advantages and positive impacts of AI; limitations, disadvantages or negative impacts of AI, however in this study, the authors use the terms benefits and limitations of AI in English learning to create a table.

Table 1. Summary Of Research on The Benefits and Limitations of AI Applications in Learning and Studying English Language

Benefits	Limitations
Students enjoy learning and applying AI. AI supports students in writing (Enik Rukiati, Julien Arief Wicaksono, Gullit Tornado Taufan, Degita Danur Suharsono, 2023), (Patchara Vanichvasin, 2022)	Technology problems, limited AI capabilities, and lack of language standardization (Enik Rukiati, Julien Arief Wicaksono, Gullit Tornado Taufan, Degita Danur Suharsono, 2023)
Learners perceive positively about using AI applications, learners enjoy using AI in doing homework (Dian Toar Y. G. Sumakul, Fuad Abdul Hamied & Didi Sukyadi, 2021)	Reduced communication skills (Godwin-Jones, R, 2022)
Learner satisfaction using AI, study and homework support, personalization of learning experience, and development of various skills. (Lasha Labadze, Maya Grigolia & Lela Machaidze, 2023) Increase motivation to study, develop language skills, improve academic performance, Personalized learning, and environmental adaptation, and Instant feedback (Patchara Vanichvasin, 2022)	reliability, accuracy, and ethical considerations, limited interaction, incorrect responses, limited personalized feedback, failure to understand complex expressions (Lasha Labadze, Maya Grigolia & Lela Machaidze, 2023)
Increase motivation to study and actively study (Ching-Yi Chang, Gwo-Jen Hwang, Meei-Ling Gau, 2022)	
Develop language skills (Esteban Vázquez-Cano, Santiago Mengual-Andrés, and Eloy López-Meneses, 2021)	The answer is misleading (Patchara Vanichvasin, 2022)
Improved learning performance, self-assessment, and self-regulation of learning (Víctor González-Calatayud, Paz Prendes-Espinosa, and Rosabel Roig-Vila, 2021)	Limit interactions (Esteban Vázquez-Cano, Santiago Mengual-Andrés, and Eloy López-Meneses, 2021)
Personalized learning and environmental adaptation (Hyangeun Ji, Insook Han & Yujung Ko, 2022)	
Easy access (Yang, Hyejin; Kim, Heyoung; Lee, Jang Ho; Shin, Dongkwang, 2022)	

Source: Authors

Research Methodology

Research Methods

Based on the synthesis of research on the application of AI in English language learning and teaching, the authors developed a questionnaire to collect data on the status of using AI tools in English learning of high school students. Because learning English at high schools in Vietnam is quite diverse, the authors only investigated students who chose English as a compulsory subject for final exams or admission to universities. The authors selected the students at LV school for investigation. The total number of students in three grades: grade 10, grade 11, and grade 12 is 300, with 100 students each grade. However, when the questionnaire was distributed, 297 students fully answered the questions in the questionnaire. The investigation will be held at the end of May 2024, when students are preparing for summer break.

Data Processing

Data about the name, student code, class code, gender, and other personal information are not included in the data processing. The questionnaire includes an explanation of AI tools including web tools used on smartphones and computers for students to clearly understand. AI applications in English learning are explained in the questionnaire as students' use of AI tools in the four skills of listening, speaking, reading, and writing.

Question: How do you use AI tools in learning English? The question uses a five-level frequency scale: from never to always. As a result of data processing, with 67% using the highest level (always), if calculated from usually to often level, 87% of students chose. No student has never used AI tools to learn English. Thus, 100% of students have used AI in learning English, and the frequency of use is very high (see Figure 1).

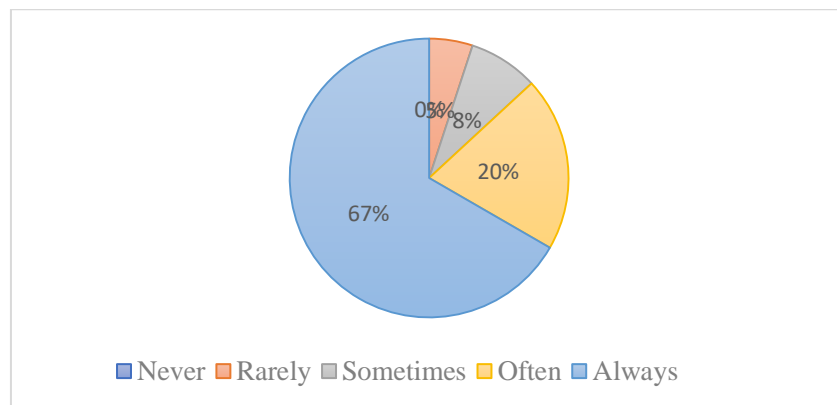


Figure 1. Frequency of Using AI in Learning English Skills by Students

Question: How do you use AI to learn English skills? The question also uses a five-level frequency scale: never to always. Data processing results show that students use the highest frequency of three skills: listening, speaking, and writing, respectively 60.6%; 67.3%, and 84.2%, while reading skills are only 8.1%. The results of this data processing show that, although the frequency of using AI in learning English students is very high (see Figure 1), students choose to use AI depending on what skills they learn. Especially in learning the four skills, students used AI tools to support writing skills at a very high level of 84.2%. (see figure 2).

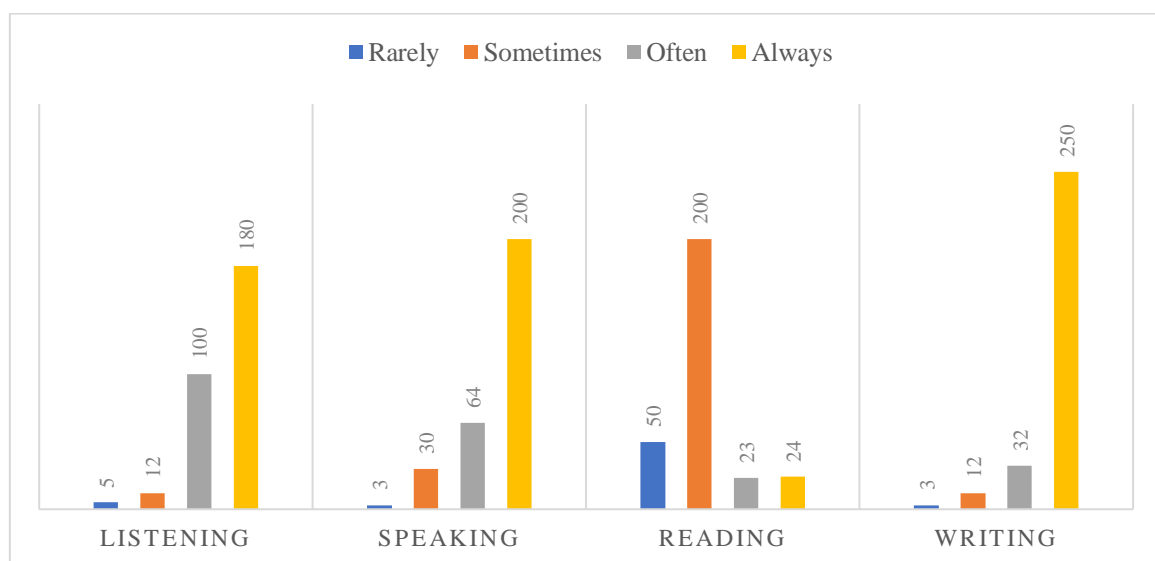


Figure 2. Frequency of Using AI in Learning English According to Student Skills

Question: How to use AI tools in learning English skills? Data processing results reflect that 100% of students are using AI in English centers (extra classes) and at home. In contrast, only 6.7% of students use AI in learning English at school. In addition, 33.7% of students use AI in learning English at other locations. The reason for the above data is that the school does not have a computer lab for learning English, and students are prohibited from using smartphones/computers during class (see figure 3).

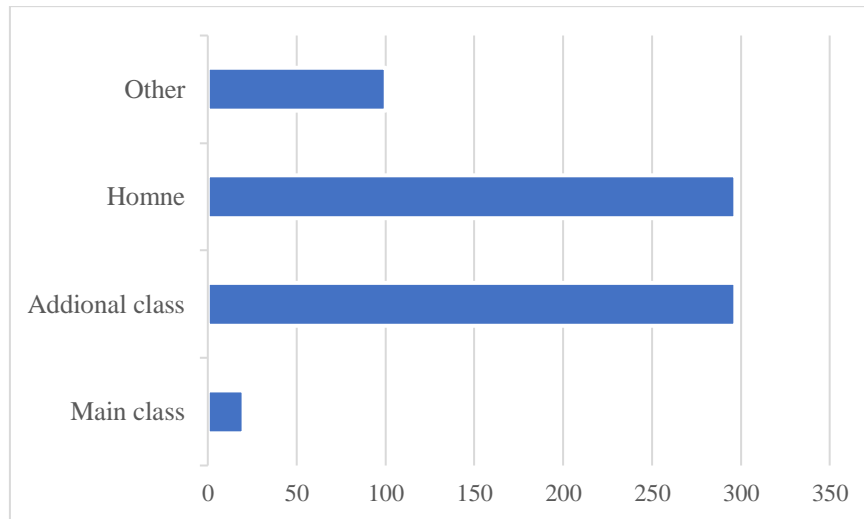


Figure 3. Places of Using AI in Students' English Learning

Question: Perceive the benefits of using AI in learning English by skills. The authors use a 5-point Likert scale, from completely disagree = 1 point, to completely agree = 5 points. In this answer, the highest level of agreement of 4 points chosen by students for the three skills of listening, speaking, and writing is 50.5%; 44.8%; and 43.4% respectively. Although students agree with the benefits of using AI in learning reading skills, the 4-point rating is significantly lower than 26.9%. The benefits of using AI in learning English in all four skills are very significant, from 3 points above 62.0%; because the total cumulative at the two lowest scores for each skill of listening, speaking, reading, and writing is 6.7%; 9.4%; 38.0% and 6.1% respectively (see figure 4). This is also confirmed in Figure 5, with three levels of perceived usefulness of AI in learning English, 77% chose yes, 4% chose no, and 19% chose not sure.

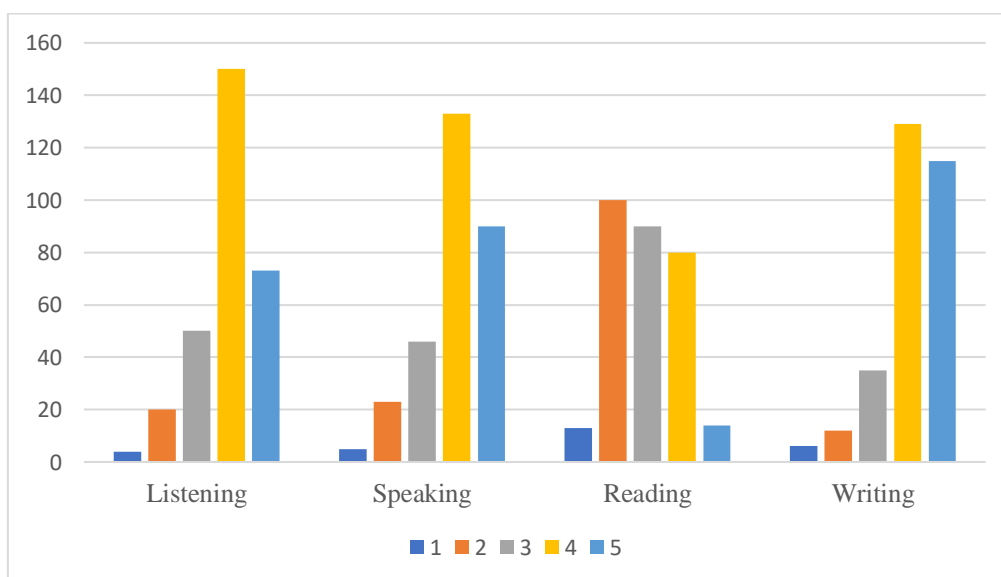


Figure 4. Perceived Benefits of Using AI In Learning English by Skills

Question: Recognizing the usefulness of AI in improving students' foreign language skills. There are three options: yes, no, not sure. (see figure 5).

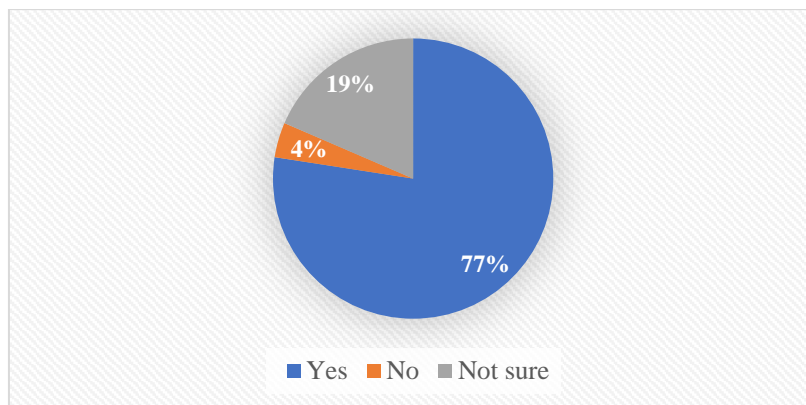


Figure 5. Perception Of the Usefulness of AI In Improving Students' Foreign Language Skills

Although using AI tools has benefits for learning English, it also has some limitations. Two questions were used to get students' opinions on this content.

Question: Students' awareness of the role of AI in English learning activities. The authors use a 5-point Likert scale, from completely disagree = 1 point to completely agree = 5 points, on three aspects: AI can support learning; AI completely replaces teachers, and AI supports the learning and teaching process. Figure 6 reflects the role of AI which is very useful for students, supports the process of learning English, and supports the teaching and learning process, but cannot completely replace teachers. The evidence is that the cumulative total at the 3 to 5-point level has 14.5% agreeing, as opposed to 85.5% strongly disagreeing. AI has benefits and an important role in the foreign language learning and training process, but it has its limitations (see Figure 6).

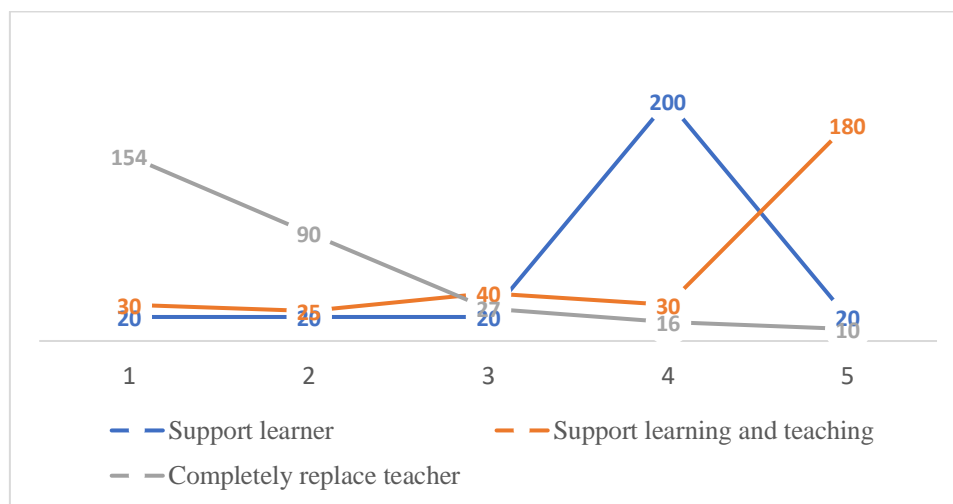


Figure 6. Perception Of the Role of AI in Learning English

Question: What limitations do you encounter when using AI to learn English? The five limiting aspects of AI selected by the authors from Table 1 are i) technical issues, ii) lack of human interaction, iii) difficulty understanding feedback, iv) inconsistent content, v) and limited access to resources. The limitations one to four are above 57.2% of the students' responses respectively. These four limitations are all related to AI solutions that do not meet the needs of users. As for the fifth difficulty, 40.4% answered the choice, reflecting that opportunities to access AI still have barriers, such as lack of available free AI, and difficulty access to the free Internet (see figure 7)

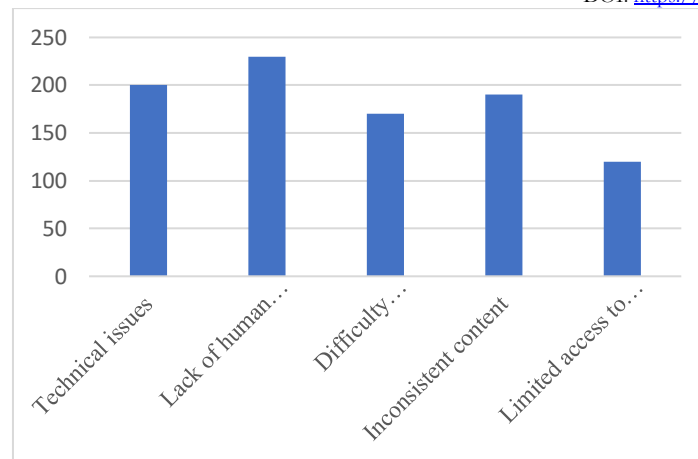


Figure 7. Limitations of Using Ai in Learning English

Question: Your recommendation to schools/teachers to increase the use of AI to support English learning, three answer options: i) Equip computer labs and AI for English teaching and learning; ii) Encourage students to use AI during English class; iii) Do not prohibit using AI during English lessons. Students opinions are answered in five levels, from completely disagree = 1 point to completely agree = 5 points. The results of answering questions and opinions from level 4 to level 5 point are very high, with values of 67.3% respectively; 70.7% and 66.3% for the three options (see figure 8).

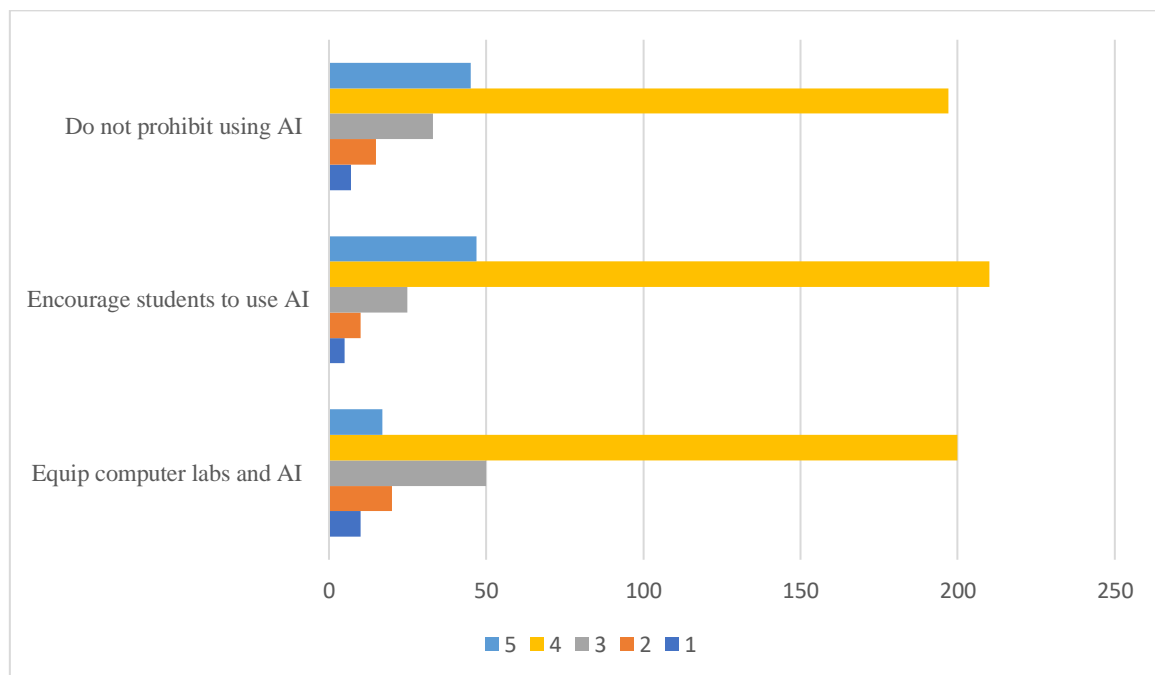


Figure 8. Recommendations To Increase the Use of AI In Learning English

Discussion

Studies on the use of AI tools in learning English and the investigation results in this study both confirm its benefits. The survey results showed that 100% of students who chose to study English for admission or high school graduation exams at LV school used AI to improve their English learning skills. Although the frequency of using AI to learn skills varies, students use it very often to learn listening, speaking, and writing skills. This reflects the role of AI tools that students choose and are willing to use for learning purposes.

The survey results also show the benefits of AI in learning four English skills and the usefulness of AI in improving students' foreign language skills. While previous studies emphasize the benefits of using AI tools in learning English in terms of enjoyment of discovery, customized learning, increasing learning motivation, and developing learning skills., this survey found that AI tools benefit learners according to learning skills, most notably writing skills 83.8% recorded benefits at 4 to 5 points on a scale of 1- 5; Next are listening skills and speaking skills at 75.1%, recording benefits at 4 to 5 points, the lowest is reading skills at 57.2%.

In addition to the benefits, the survey results also reflect the limitations of using AI tools in learning English. AI has supported humans, but AI tools cannot replace humans. The survey results highlight the benefits and limitations of AI, but overall, the benefits of AI outweigh the limitations, with 23% of respondents saying that using AI does not or not-sure to improve students' foreign language skills. The limitations of AI tools are unavoidable for many reasons: some AI tools are of good quality, while some AI tools are not smart enough, most students are new to using some AI tools, and AI is lacking smart features, and AI is in the process of developing to meet human needs.

The survey results also reflect that the use of AI is not considered important in schools. Students use AI tools personally, spontaneously, and learn and use themselves. Students have a need to use AI to support learning foreign language skills but have not received investment or attention at school. Recommendations on facilitating and supporting, not prohibiting using AI tools were selected by students, expressing their wishes as very valid.

In summary, based on the results of this survey, we can conclude that AI tools play an important role in students' English learning. The benefits of AI may vary for each learner and skills, but the overall benefits are clear. However, to use AI more effectively, it is necessary to address the limitations that learners face, which are organizational issues, schools need to support and facilitate for students to use AI at school. In addition, other issues such as technology, AI tool selection, and interaction problems with AI will be resolved through technical and organizational measures, with the support of teachers. With the continuous improvement of AI tools, using AI in learning English will be more effective and help students excel in their English learning skills.

Conclusion

The current and potential benefits of AI in English learning make it a promising area for continued research and development. AI has brought significant benefits to English learners, but there are also some limitations to keep in mind. Even if AI develops to a certain extent, AI is the only technology that supports humans but cannot replace humans. Schools, teachers, and students need to be supported to officially use AI in learning and teaching English. AI tool users must combine the power of AI with their knowledge and experience to meet their needs and goals and use AI effectively. Limitations of AI and negative impacts of AI must be detected early, controlled, and resolved so that AI platforms and tools can be used usefully, contributing to improving learning capacity and promoting positive results for all users.

References

- Ching-Yi Chang, Gwo-Jen Hwang, Meei-Ling Gau. (2022). Promoting students' learning achievement and self-efficacy: A mobile chatbot approach for nursing training. *British Journal of Educational Technology*, 53(1), 171-188.
- Cristhian Joel Lucas Soledispa, Paola Nathaly Mantilla Carrera, Araceli Maritza Dávila Macías, Luisa Fernanda Jaramillo Crespo, Diego Omar Armijos Solano. *Ciencia Latina Revista Científica*. (2024). The Potential of Artificial Intelligence to Improve Speaking Skills in a Second Language (English) Fluently. *Ciencia Latina Revista Científica Multidisciplinar*: Vol. 7 Núm. 4 (2023), 3826-3836.
- Deborah G. Johnson, Mario Verdicchio. (2024). The sociotechnical entanglement of AI and values. *AI & SOCIETY*, 1-10.
- Dessy Rizky Nuraini Herawati, WiwikWidajati, Endang Pudjiastuti Sartinah. (2022). The Role of Text To Speech Assistive Technology to Improve Reading Ability in E-Learning for ADHD Students. *Journal of ICSAR*, Volume 6 Number 2, 169-174.
- Dian Toar Y. G. Sumakul, Fuad Abdul Hamied & Didi Sukyadd. (2021). Students' Perceptions of the Use of AI in a Writing Class. *Advances in Social Science, Education and Humanities Research*, volume 624, 52-57.

- Dian Toar Y. G. Sumakul, Fuad Abdul Hamied & Didi Sukyadi. (2021). Students' Perceptions of the Use of AI in a Writing Class. *Advances in Social Science, Education and Humanities Research*, volume 624, 52-57.
- Do The Duong, Hoang Dieu Linh. (2023). Artificial Intelligence – Opportunities and Challenges in Education. *Economy & Forecast Review*, No 14, 1-6.
- E. Madhavi, Lavanya Sivapurapu, Vijayakumar Koppula, P. B. Esther Rani, Vemugant Sreehar. (2023). Developing Learners' English Speaking Skills using ICT and AI Tools. *Journal of Advanced Research in Applied Sciences and Engineering Technology* 32, Issue 2 (2023), 142-153.
- Enik Rukiati, Julien Arief Wicaksono, Gullit Tornado Taufan, Degita Danur Suharsono. (2023). AI on Learning English: Application, Benefit, and Threat. *JLCT*, Volume 1, Number 2, 32-40.
- Esteban Vázquez Cano, Santiago Mengual Andrés, and Eloy López Meneses. (2021). Chatbot to improve learning punctuation in Spanish and to enhance open and flexible learning environments. *International Journal of Educational Technology in Higher Education* 18(1), 1-20.
- Godwin-Jones, R. (2022). Partnering with AI: Intelligent writing assistance and instructed language learning. *Language Learning & Technology*, Volume 26, Issue 2, 5-24.
- Gordon Baxter, Ian Sommerville. (2010). Socio-technical systems: From design methods to systems engineering. *Interacting with Computers*, Volume 23, Issue 1, January 2011, 4-17.
- Haroon Sheikh, Corien Prins, & Erik Schrijvers. (2023). Artificial Intelligence: Definition and Background. In: *Mission AI. In R. f. Policy, Research for Policy* (pp. 15-41). Cham: Springer.
- Ho Nguyen. (2024). Research on the Impact of Artificial Intelligence Tools on the Self-Learning Process of English Language Students, University of Foreign Languages, Danang University. Danang: Danang University.
- Hyangeun Ji, Insook Han & Yujung Ko. (2022). A systematic review of conversational AI in language education: Focusing on the collaboration with human teachers. *Journal of Research on Technology in Education* 55(1), 48-63.
- Karikoga Gorejena, Nehemiah Mavetera, Mthulisi Velepini. (2016). A critique and potency of socio-technical systems theory: a quest for broadband growth and penetration. *Public and Municipal Finance*, Volume 5, Issue 2,, 7-19.
- Krishnamurthy & Sandeep. (2020). The future of business education: A commentary in the shadow of the Covid-19 pandemic. *Journal of Business Research*, Elsevier, vol. 117(C), 1-5.
- Lasha Labadze, Maya Grigolia & Lela Machaidze. (2023). Role of AI chatbots in education: systematic literature review. *International Journal of Educational Technology in Higher Education*, 1-17.
- M.Samanth Reddy. (2016). Importance of English Language in today's World. *International Journal of Academic Research*, ISSN: 2348-7666; Vol.3, Issue-4(2), 179-184.
- Muhamad Taufik Hidayat. (2024). Effectiveness of AI-Based Personalised Reading Platforms in Enhancing Reading Comprehension. *Journal of Learning for Development* 11(1), 115-125.
- Nguyen Thi Lam. (2023). Promoting Learner Autonomy in Learning English Listening Skills through Mobile-Assisted Applications. *AsiaCall Online Journal*, Vol 14, No 2, 118-139.
- Patchara Vanichvasin. (2022). Impact of Chatbots on Student Learning and Satisfaction in the Entrepreneurship Education Programme in Higher Education Context. *International Education Studies*; Vol. 15, No. 6, 15-26.
- Pouria Akbarighatar, Ilias Pappas, Polyxeni Vassilakopoulou. (2023). A sociotechnical perspective for responsible AI maturity models: Findings from a mixed-method literature review. *International Journal of Information Management Data Insights*, 1-19.
- Rajathurai Nishanthi. (2018). Important of learning English in today world. *International Journal of Trend in Scientific Research and Development (ijtsrd)*, ISSN: 2456-6470, Volume-3 | Issue-1, 871-874.
- Rizky Vita Losi, Eka Putra Putra, Nurbaiti Ali, Adinda Silvana Dewi. (2024). Using Artificial Intelligence (AI) to Improve EFL Students' Writing Skill. *International Journal of English and Applied Linguistics*, Volume : 4 | Number 1, 62-70.
- Rudolph Oosthuizen & Carien van 't Wout. (2019). Sociotechnical System Perspective on AI Implementation for Modern Intelligence System. 24th International Command and Control Research and Technology Symposium (ICCRTS) (pp. 1-13). Washington, Maryland, USA: Council for Scientific and Industrial Research.
- Şahin Gökçearslan, Cansel Tosun, Zeynep Gizem Erdemir. (2024). Benefits, Challenges, and Methods of Artificial Intelligence (AI) Chatbots in Education: A Systematic Literature Review. *International Journal of Technology in Education (IJTE)*, 7(1), 19-39.
- Shireen Mostafa Ahmed Abdalkader. (2022). Using Artificial Intelligence to improve Writing Fluency for The Preparatory Stage Students in Distinguished Governmental language Schools. *Egyptian Journal of Educational Sciences* (39) Issue 2 (Part Two), 1-32.
- Sri Lestari, Wahyuningsih Usadiati & Misrita. (2021). The Correlation Between Students' Artificial Intelligence and Their English Reading Skills Achievement. *Jurnal Keilmuan Pendidikan Bahasa dan Sastra Indonesia* Vol 3 No 2, 103-111.
- Statista. (2024, April 19). <https://www.statista.com/statistics/1417151/generative-ai-revenue-worldwide/>. Retrieved from <https://www.statista.com/>: <https://www.statista.com/>
- Stefan Gabriel, Dominik Bentler, Eva-Maria Grote, Caroline Junker, David Meyer zu Wendischhoff, Michael Bansmann, Benedikt Latos, Daniela Hobscheidt, Arno Kühn, Roman Dumitrescu. (2022). Requirements analysis for an intelligent workforce planning system: a socio-technical approach to design AI-based systems. 32nd CIRP Design Conference (CIRP Design 2022) - Design in a changing world, Volume 109 (pp. 431-436). The International Academy for Production Engineering.
- Suryana, I., Asrianto., & Murwantono, D. (2020). Artificial Intelligence to master English listening skills for non-english major students. *Journal of Languages and Language Teaching* 8(1):48, 48-59.
- Tira Nur Fitria. (2021). The Use Technology Based On Artificial Intelligence In English Teaching And Learning. *The Journal of English Language Teaching in Foreign Language Context*, vol. 6, no. 2, 213-223.

- Tran Thi Thu Hien. (2024). AI Tools in Teaching and Learning English Academic Writing Skills. Proceedings of the AsiaCALL International Conference (pp. 170-187). Da Nang : PAIC – ISSN: 2833-6836.
- Tran Tin Nghi, Tran Huu Phuc, Nguyen Tat Thang. (2019). Applying Ai Chatbot For Teaching A Foreign Language: An Empirical Research. International Journal of Scientific & technology research, Vol 8, issue 12, 897=902.
- Tuti Hidayati. (2016). Integrating ICT in English Language Teaching and Learning in Indonesia. Journal of English Education and Linguistic Studies., vol. 3, no. 1, 38-61.
- Víctor González-Calatayud, Paz Prendes-Espinosa, and Rosabel Roig-Vila. (2021). Artificial intelligence for student assessment: A systematic review. Applied Sciences 11(6), 54-67.
- Xinyi Huang, Di Zou, Gary Cheng, Xieling Chen, and Haoran Xie. (2023). Trends, Research Issues and Applications of Artificial Intelligence in Language Education. Educational Technology & Society, 26(1), 112-131.
- Yang, Hyejin; Kim, Heyoung; Lee, Jang Ho; Shin, Dongkwang. (2022). Implementation of an AI chatbot as an English conversation partner in EFL speaking classes. ReCALL 34(3), 327-343.
- Zou, B, Liviero, S. Hao, M. Y. & Wei, C. Y. (2020). Artificial Intelligence Technology for EAP Speaking Skills: Student Perceptions of Opportunities and Challenges. Technology and the Psychology of Second Language Learners and Users, 433-463.