

## Impacts of AI tools on self-study by English-majored students at Quang Nam University

Doan Phan Anh Truc<sup>1\*</sup>, Nguyen Thi Hue<sup>1</sup>, Tran Ngoc Que Chau<sup>1</sup>

<sup>1</sup> Faculty of Foreign Languages, Quang Nam University, Vietnam

\*Corresponding author's email: [trucdpa@danang.gov.vn](mailto:trucdpa@danang.gov.vn)

 <https://orcid.org/0009-0008-4147-9245>

 <https://doi.org/10.54855/acoj.251622>

®Copyright (c) 2025 Doan Phan Anh Truc, Nguyen Thi Hue, Tran Ngoc Que Chau

### Abstract

It is undeniable that artificial intelligence (AI) tools make a major contribution to fields across society, such as medicine, business, and education. Some studies on the impact of AI on English learning and teaching have been done. The studies showed some advantages and disadvantages of AI tools in general; however, they haven't yet investigated specific participants to analyze them in detail. Our study emphasizes how our students benefit from AI tools and focuses particularly on the obstacles they face when using them. The survey used qualitative and quantitative methods and included a questionnaire for 150 English-majored students at Quang Nam University and one for teachers. The findings highlighted how students improve their English practice skills and how they are motivated by learning with AI. At the same time, the research results revealed that a lack of face-to-face interaction, inaccurate feedback, and reduced self-discipline are significant challenges. The study aims to make a specific contribution to English teaching and learning through AI tools.

**Keywords:** AI, self-study, impacts of AI, self-discipline, feedback

### Introduction

Nowadays, advances in science and technology have created a range of AI tools for education, especially for learning foreign languages. Thanks to AI tools, learning foreign languages is really convenient. Learners can use AI tools to search for learning materials and methods to support their self-study and achieve their learning objectives. As for English learning, AI tools are being increasingly used at all levels, especially by tertiary students. Unlike traditional learning methods, where learners depend mainly on textbooks or teachers, AI tools help learners be more independent and proactive. Learners can proactively search for learning materials and choose appropriate learning methods with AI technology to acquire knowledge. Rukiati et al. (2023, p. 33) stated that "AI has revolutionized autonomous English learning". There is no doubt that AI tools offer significant benefits for learners. In fact, our students make the best use of AI tools for their English learning, especially for English skill practice and translation. However, we still see errors in their English use, both in spoken and written language. This shows that, in addition to its benefits, AI technology may also pose challenges for our students. To understand how AI technology affects English learning, examining its benefits and challenges is important. Therefore, we decided to conduct a survey on the impacts of AI tools

on self-study among English majors at Quang Nam University to identify the benefits and challenges they experience when using AI tools for their learning. By doing this, the research results may help learners use AI tools more effectively and identify the obstacles to their use, thereby reducing their negative impacts.

## Literature review

The application of AI tools in foreign language teaching and learning is no longer strange to teachers and learners. There have been some studies on the advantages and disadvantages of AI tools in foreign language teaching and learning. Liu (2023) showed the effects of using AI technologies such as speech recognition, machine translation, natural language processing, and chatbots. According to the author, learners can receive immediate feedback on their pronunciation and intonation thanks to speech recognition technology or a chatbot, improve the efficiency and quality of translation through machine translation technology, or learn a foreign language in a natural way through natural language processing technology or a chatbot.

As for Rebolledo Font de la Vall & González Araya (2023), AI tools increase effectiveness in students' learning, save their time, and provide immediate feedback on the use of vocabulary, grammar, pronunciation, and writing. In the same vein, AI-supported language learning tools provide an enjoyable and stimulating learning environment, especially group work (Divekar et al., 2021), and keep students enthusiastic and motivated (Wei, 2023). Sharma et al. (2024) examined the impact of AI tools in English teaching and highlighted their significance and justification for their use, while also noting some challenges in their use in English classes. The researchers stated that integrating AI into the language-learning and teaching process highlights active engagement and creativity among learners using AI tools. They pointed out obstacles, including the potential for bias, learner autonomy, and data privacy in learning with AI tools.

Regarding Dugošija (2024), the author clarified the benefits of using AI tools in English teaching, specifically in English skill practice, namely listening, speaking, writing, and reading. In addition to the benefits, the researcher also showed that overreliance on technology, which may lead to reduced human interaction, is a significant challenge. Besides, the author stated that the ever-increasing number of AI-supported language-learning tools, especially ChatGPT, is also a challenge for teachers. Tran, H. N., Le, T. T. N., and Tran, V. B. U. (2025) explored the benefits and challenges of AI tools in learning academic writing by MA students. AI tools help improve writing skills and provide support, but also display over-reliance and limitations in addressing complex writing issues. By the same token, Nguyen, T. Y. P., Nguyen, N. T., & Phan, N. K. H. (2025) discussed the effectiveness and challenges of using ChatGPT in writing by postgraduate students. The authors stressed that ChatGPT provides unreliable and inaccurate information, often without references or citations, leading to plagiarism.

AI technology contributes enormously to English learning, especially in English skill practice, but it also poses some obstacles. The studies mentioned have highlighted the advantages of AI and listed some concerns associated with its use; however, they have not clarified learners' reasoning when identifying the pros and cons. In the context of AI tool use in the research, we would like to receive our students' evaluations and reflections on their use of AI tools for self-

study. From that, we aim to provide orientation for teachers and offer suggestions for English teaching in the new era, Industry 4.0.

### *Research Questions*

To fulfill the purpose of the study, the survey sought to answer the following research questions:

1. What are the benefits of using AI tools for self-study by English-majored students at Quang Nam University?
2. What are the challenges of using AI tools for self-study by English-majored students at Quang Nam University, and what suggestions for teachers in Industry 4.0?

## **Methods**

### *Pedagogical Setting & Participants*

The participants selected for the study were 150 English majors at Quang Nam University, including 85 second-year students, 33 third-year students, and 32 fourth-year students. The use of AI tools does not depend on students' English levels. Therefore, the selection of second-, third-, and fourth-year students for the investigation was appropriate. Based on the researchers' observations of students' learning in the classroom, the authors found that students had experience using AI tools for their learning. Therefore, the study is intended to investigate what AI tools they used for their self-study of English, what advantages they had from using AI tools, and what disadvantages they encountered with AI tools.

The students were asked to answer a questionnaire of both closed-ended and open-ended questions individually and objectively. The questionnaire was divided into three content groups. The first one was designed to gather learners' information on using AI tools: which AI tools have been utilized and how much time they spend using them each day. The second group of questions was about the benefits of using AI tools by students; which subjects were improved via AI tools; how the learning environment with AI tools was; and how learning motivation and interaction were. The last one, including open-ended questions, focused on obstacles caused by AI tools in the learning process. Besides, the open-ended questions were designed for 10 English teachers using AI tools in their teaching, to provide some guidance for teachers in the digital age.

### *Design of the Study*

The research design is a descriptive survey approach for collecting and analyzing data. The approach combines qualitative methods with quantitative data, presenting percentages and frequencies.

### *Data collection & analysis*

The questions were carefully drafted to explore the benefits and challenges of using AI tools for students' self-study. The questionnaire copies were handed to the participants so they could provide detailed responses. The collected data were sorted into three groups of themes mentioned in the research questions. The quantitative method was used to count occurrences

and represent frequencies manually, and the descriptive and qualitative methods were used to analyze the data.

## Findings and discussion

### *Benefits of using AI tools for English self-study*

AI tools are widely used in foreign language teaching and learning, and there is no exception among English majors at Quang Nam University. Through the investigation, all students used AI tools for their studies outside the classroom for an hour to three hours a day, including ChatGPT, Google Translate, Grammarly, Duolingo, T-Flat, Elsa Speak, and Flow Speak. There is a remarkable difference in how these AI tools are used. As indicated in Table 1, ChatGPT and Google Translate were the most popular, with 32.8%, followed by Duolingo at 23.1%. T-Flat and Grammarly were not very common, accounting for 6.7% and 4.1%, respectively. Elsa Speak and Flow Speak were rarely used, with proportions of 1.0% and 0.5%, respectively. Using various AI tools shows that students are highly engaged in applying them to their English learning and select different tools for their learning. Among the AI tools, ChatGPT is new, but it has been prioritized. This reflects the fact that the students keep up with technological advancements to enhance their English learning.

Table 1.

Distributions of AI tools used by English-majored students at Quang Nam University

| AI Tools         | Distributions | Rate (%) |
|------------------|---------------|----------|
| Chat-GPT         | 63            | 32.3     |
| Google Translate | 63            | 32.3     |
| Duolingo         | 45            | 23.1     |
| TFlat            | 13            | 6.7      |
| Grammarly        | 8             | 4.1      |
| Elsa Speak       | 2             | 1.0      |
| Flow Speak       | 1             | 0.5      |
| <b>Total</b>     | 195           | 100      |

Dugošija (2024) stated that AI tools help search for learning materials and methods for both English learning and teaching, and enhance students' listening, speaking, reading, and writing skills. For English majors at Quang Nam University, one major benefit of AI tools is improved English learning. The AI applications are very useful for the students' English skill practice, pronunciation, and vocabulary learning. Besides, they are also beneficial to their translation practice, grammar, and language theory learning. As shown in Table 2, the students enhanced their vocabulary through using AI tools, with the highest rate at 16.3%, followed by speaking skills at 15.6%. In contrast, language theories were the lowest, just 3.6%. Their listening and writing skills were also developed, accounting for 12.9% and 12.5% respectively. Besides, the students made progress in pronunciation at the same rate as writing. Translation and grammar were also improved, taking up relatively small percentages of 8.2% for grammar and 8% for

translation. It is noticeable that English skills, together with vocabulary and pronunciation, are remarkably improved by the majority of students compared to translation, grammar, and language theories. Or rather, the students may use the tools for English skill practice more effectively than those for the other subjects.

Table 2.

Distributions of subjects improved through using AI tools by English-majored students at Quang Nam University

| AI Tools          | Distributions | Rate (%)   |
|-------------------|---------------|------------|
| Pronunciation     | 56            | 12.5       |
| Listening         | 58            | 12.9       |
| Speaking          | 70            | 15.6       |
| Reading           | 47            | 10.5       |
| Writing           | 56            | 12.5       |
| Vocabulary        | 73            | 16.3       |
| Translation       | 36            | 8          |
| Grammar           | 37            | 8.2        |
| Language Theories | 16            | 3.6        |
| <b>Total</b>      | <b>449</b>    | <b>100</b> |

Another advantage of using AI tools for the students' self-study of English is learning motivation. Most students agreed they were highly motivated and excited about AI tools. They felt more confident when giving answers without interacting face-to-face. When asked about reasons for this, the majority (77%) answered that they had no fear of making errors in vocabulary, grammar, or pronunciation in speaking or writing because AI tools could help them correct their errors immediately, unlike in the classroom. What's more, the thing that made the students very interested in AI tools was the instant, detailed feedback they received. This did not interfere with unrelenting lessons. They added that in the case of self-study without AI tools, if they wanted to know whether their answers were right or wrong, they had to wait for their teachers' feedback. Therefore, AI tools facilitated language practice, helped students gain a good deal of knowledge, and saved time during self-study. Finally, AI tools provide a convenient and flexible English-learning environment. Most of them (94%) said that they were really active and flexible in their self-study. They can learn anytime, anywhere with AI tools.

To sum up, AI tools were widely used for English self-study by English majors at Quang Nam University. AI tools are very useful for students' vocabulary learning and practice of speaking skills. In addition to this, other English language skills, pronunciation, grammar, and translation have also been improved via using the tools. Besides, the students were really motivated and enjoyed their self-study. Self-study with AI tools is really convenient because learning can take place anytime, anywhere, and using these tools helps save a lot of time.

### *Challenges of using AI tools for English self-study and some suggestions*

Despite the advantages and benefits of AI tools, there are some challenges to their use for students' self-study. One concern is a lack of human interaction and a poor physical environment, as stated by Dugošija (2024). 80,6% of the students said that, unlike in the classroom, where teachers and students engage in a variety of activities together, AI tools could not design a series of interesting and flexible activities that would allow students and their teacher to interact during the teaching and learning process. It is only the teacher who builds creative activities and gives quick responses in any case. Only the teacher in the classroom uses their mother tongue to explain further, if needed. It can be added that more face-to-face interaction may help the students be more active, confident, positive, and less dependent on technology. Besides, the physical environment may help the students be more motivated and less stressed. Another challenge is that AI tools can misinterpret mother-tongue interference, leading to incorrect feedback, especially in translation. Some of the students (16%) said that in some cases, AI tools gave wrong answers or inaccurate feedback. This may be because AI tools do not recognize cultural features reflected in the language, or because there are differences between English and Vietnamese that they may not understand, or because they may not detect mother-tongue interference. Additionally, the students mentioned that AI tools could not provide the keys to the exercises in the textbooks their teachers handed out. They could not check their homework answers. Therefore, in this case, they felt confused about their self-study. The last obstacle to English learning with AI tools is a reduction of self-discipline. As mentioned above, the students can benefit from the convenience of AI tools via learning time and place, i.e., they can learn whenever and wherever they like. The convenience affects self-discipline in learning, as it can lead to disorganization or a lack of discipline.

### **Discussion**

As shown in the findings, the students used a variety of AI tools for their self-study. The finding shows that the students may choose AI tools suitable for each subject and for their learning purpose, for example, Chat-GPT used for speaking, writing, vocabulary or translation; Google Translate used for translation or writing; Grammarly used for grammar, speaking or pronunciation, etc. Using AI tools helps the students develop their English skills, especially speaking and writing skill, however, the tools are less effective for translation learning and the subjects of language theories. The students said that they were not shy and felt more confident when learning with AI tools, and they were not afraid of making errors in speaking or pronunciation because they did not interact face-to-face. This may mean that confidence is a very important factor that influences students' speaking, and that learning in a face-to-face environment reduces students' confidence. Additionally, AI tools give immediate information and feedback, as mentioned by Rebolledo Font de la Vall & González Araya (2023) and Liu (2023), so the students may save more time in their self-study. The students may not be too tired after hours of learning, and this may be the very reason they enjoy learning. Remarkably, learning with AI tools is very convenient because students can learn anytime and anywhere. Such a flexible and convenient environment is a prominent feature of AI tools that teachers cannot bring to learners. However, learning with AI tools lacks human interaction and a

physical environment. This is a big challenge students face because sometimes they need further explanation in the teacher's mother tongue. In this case, AI tools are unlikely to meet their learning needs. Moreover, the physical environment may help students actively participate in teacher-designed activities. They can move around the classroom or run to the blackboard during activities. The activities in the teaching-learning process may help the students be more active and confident, and at the same time, they may be mentally and physically developed. Another challenge that the students mentioned is incorrect feedback. Sometimes AI tools provide inaccurate feedback, as noted by Nguyen, T. Y. P., Nguyen, N. T., & Phan, N. K. H. (2025), especially in translation. This occurs because AI tools may not detect differences between English and Vietnamese, leading to mother-tongue interference in the target-language translations. The challenge will partly affect improving the students' translation learning. What's more, inaccurate feedback can leave students confused, hesitant, and unreliable with AI tools. This may reduce the very value of AI tools. Ultimately, as mentioned in the benefits of AI tools, a convenient learning environment for students will reduce self-discipline. The students will not follow any rules or regulations set by schools or teachers.

In brief, AI tools offer some advantages for English-major students at Quang Nam University; at the same time, they create disadvantages for students' self-study. Therefore, grasping the nature of each tool will help learners achieve learning goals as expected.

### *Some suggestions for teachers*

AI technology plays a key role in English learning and teaching today, as reflected in its numerous benefits. Although AI-supported English learning yields positive outcomes for learners, it is clear that AI tools cannot replace teachers. Therefore, teachers were still a significant factor in the Fourth Industrial Revolution. However, teachers are required to master information technology and meet the standard of teaching with AI technology. Or rather, teachers must adapt to great changes and keep up with Industry 4.0. They need to proactively apply AI tools to the design of teaching content and methods. Moreover, the Fourth Industrial Revolution requires teachers to change their mindset, adapt their ways of working, and proactively create a culture of creativity in the classroom. They must serve as sources of inspiration for their students, enabling them to gain the quintessence of the digital age. Each teacher must create a dissimilarity, that is, the difference between them and AI tools. They teach their students what AI tools cannot, and how to apply them effectively. Otherwise, teachers will lose their role, as AI tools will eventually take on their tasks. Therefore, teachers continuously innovate their teaching methods, proactively integrate information technology in effective teaching, and update advanced programs in line with social development trends. Moreover, teachers must empower their students for lifelong learning, not only in books and classrooms, but also anytime, anywhere, to achieve sustainable development goals. Additionally, students are proactive in their creative pursuit of knowledge. Managers and teachers must keep up with changes and developments, quickly adapt, and evolve in time to create human resources that meet society's needs and serve the community.

## Conclusion

In conclusion, AI tools significantly impact English self-study among English-majored students at Quang Nam University, offering numerous benefits while addressing some challenges. The major advantages that AI tools offer are improvements in students' English learning, including the development of English language skills, pronunciation, vocabulary, grammar, and translation practice. AI tools create a motivated and enjoyable learning environment, stimulate students' learning, save time, and give instant feedback. The students are very active with their studies using AI tools. However, a lack of human interaction, inaccurate feedback, reduced self-discipline, and mother-tongue interference are major obstacles students reflect on when using AI tools for self-study. It is hoped that these initial findings can be of some help to the students' English learning using AI tools.

## References

- Divekar, R. R., Drozdal, J., Chabot, S., Zhou, Y., Su, H., Chen, Y., Zhu, H., Hendler, J. A., & Braasch, J. (2021). Foreign language acquisition via artificial intelligence and extended reality: Design and evaluation. *Computer Assisted Language Learning*, 35, 2332-2360. <https://doi.org/10.1080/09588221.2021.1879162>
- Dugošija, T. (2024). Benefits and Challenges of Artificial Intelligence in English language teaching. *Knowledge – International Journal*, 62 (2). 275-280.
- Liu, M., Y. (2023). Exploring the application of Artificial Intelligence in Foreign Language Teaching: Challenges and Future Development. *SHS Web of Conferences*, 2023, 168. [Doi.org/10.1051/shsconf/202316803025](https://doi.org/10.1051/shsconf/202316803025)
- Rebolledo Font de la Vall, R., & González Araya, F. (2023). Exploring the benefits and challenges of AI-language learning tools. *International Journal of Social Sciences and Humanities Invention*, 10(1), 7569–7576. <https://doi.org/10.18535/ijsshi/v10i01.02>
- Rukiati, E., Wicaksono, J. A., Taufan, G. T., & Suharsono, D. D. (2023). AI on learning English: Application, benefit, and threat. *Journal of Language, Communication, and Tourism*, 1(2), 32–40. <https://doi.org/10.25047/jlct.v1i2.3967>
- Nguyen, T. Y. P., Nguyen, N. T., & Phan, N. K. H. (2025). The Challenges of Applying ChatGPT in the Academic Writing of Postgraduate Students in English Major at IUH. *International Journal of AI in Language Education*, 2(1), 20-37. <https://doi.org/10.54855/ijaile.25212>
- Tran , H. N., Le, T. T. N., & Tran, V. B. U. (2025). AI Tools in Learning Academic Writing: Benefits and Challenges for MA Students in the English Language Studies at the Industrial University of Ho Chi Minh City. *International Journal of AI in Language Education*, 2(1), 74-91. <https://doi.org/10.54855/ijaile.25215>

- Sharma, S. et al. (2024). Impact of Artificial Intelligence in English Language Teaching. *Migration Letters*, 21(S4), 1606-1612. [www.migrationletters.com](http://www.migrationletters.com).
- Wei, L. (2023). Artificial intelligence in language instruction: Impact on English learning achievement, L2 motivation, and self-regulated learning. *Frontiers in Psychology*, 14, 1261955, 1-14. <https://doi.org/10.3389/fpsyg.2023.1261955>

## Biodata

Doan Phan Anh Truc, Ph.D, Faculty of Foreign Languages, Quang Nam University, Vietnam  
She has been a lecturer in English at Quang Nam University for over 20 years. She is interested in Literature in English, Theory of Translation, Syntax, and Pragmatics.

Nguyen Thi Hue, M.A., lecturer at Quang Nam University, Viet Nam. Nguyen Thi Hue has been a lecturer at Quang Nam University for nearly 20 years. She graduated from Da Nang University, Vietnam, in 2004, majoring in English Language Teaching, and in 2011, she got her Master's degree in Linguistics. She has been teaching grammar, translation, listening skills, reading skills, and English for specific purposes. She has taught English to students of different ages and levels.

Tran Ngoc Que Chau has been a lecturer at Quang Nam University since 2004. She graduated from Da Nang University, majoring in English Language. She got her Master's degree in Linguistics in 2011. She has been teaching reading skills, grammar, and English for specific purposes. Her students are of different ages and levels.