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Student perspectives on AI use in language learning

Michael Hofmeyr

Tokyo University of Science

hofmeyr@rs.tus.ac.jp

The release of ChatGPT has placed artificial intelligence (AI) firmly back in the computer-assisted language learning (CALL) spotlight, with researchers and educators considering how the newest iterations of AI chatbots can best facilitate language learning. Many are also concerned about the ethical and pedagogical implications of these emergent technologies. One often-overlooked aspect in the CALL literature on AI is the perspectives of learners themselves. How and to what extent are they already using AI tools? What AI-based practices do they consider academically honest? How do they view the effects of using AI tools on their own language acquisition? This study investigates these questions by analysing the survey responses of 115 learners of English at a Japanese university. The results indicate that most learners had already used AI tools in their academic writing, with tools that provide automated feedback on grammar being the most frequently used. The learners reported using AI tools primarily to improve the form of their second language (L2) output, rather than to generate or structure ideas themselves. Moreover, most of the learners feel that the former approach is ethically acceptable, while the latter approach is dishonest. Overall, the learners expressed positive beliefs about the potential of AI tools to improve not only their academic output, but also to develop their L2 writing proficiency more broadly.

Keywords: affective factors, artificial intelligence (AI), learner attitudes, learner beliefs, L2 writing

Introduction

The capabilities and practical applications of artificial intelligence (AI) technologies have advanced rapidly over recent years (Heift & Schulze, 2015). Foreign language education has already been significantly impacted by these developments as learners gain access to increasingly powerful AI tools capable not only of improving grammar and vocabulary choices in academic writing, but also of generating highly coherent and cohesive original written texts (Godwin-Jones, 2022). Such tools may hold strong potential for learning (Cai et al., 2024) but they also pose an array of complex new problems on matters of pedagogical effectiveness and academic integrity (Hockly, 2023; Perkins, 2023).

Understanding how teachers, learners, and other educational stakeholders use and perceive these technologies is crucial for developing effective and equitable new classroom practices and policies. Nevertheless, systematic research on these topics remains scarce, with most studies focussing instead on the potential applications and learning outcomes of specific types of AI tools. A number of studies have investigated the attitudes and perceptions of teachers towards such tools (Alm & Ohashi, 2024; Han et al., 2020) and a few have also examined language learners' usage and perceptions. Jeon (2022) examined 36 elementary school learners in South Korea interacting with a chatbot and identified various learning affordances provided. Gozali et al. (2024) interviewed 18 learners of English in Indonesia on their experience of using automated writing evaluation tools for English and reported broadly positive attitudes. Zou et al. (2023) employed the technology acceptance model to assess how 239 learners of English in China perceived an AI speech evaluation programme and conclude that, in general, the participants viewed the tool positively, describing it as helpful and enjoyable to use.

As the literature on actual learners' usage and perceptions of AI tools for language learning purposes is still very limited, additional research in this area that spans a wider range of educational contexts is necessary. The findings could help teachers, institutions, and policy-makers to identify where AI is effectively furthering educational goals, and also to identify and address areas of concern, such as the misuse of AI or an over-reliance on the technology. Second language (L2) academic writing has been identified as an area of language education in which AI has the potential to play a particularly important role (Godwin-Jones, 2022; Li et al., 2014). In order to shed light on how learners use and perceive AI tools in this context, the current study set out to answer the following research questions:

1. What (if any) AI tools do learners use when working on English academic writing assignments?
2. For what purposes do the learners use these tools in their writing?
3. What uses of AI tools do learners consider to be academically dishonest?
4. To what extent do learners believe that these tools improve their skill and confidence in English writing?

Method

In total, 115 English-major undergraduate students enrolled in an academic English course at a national university in Japan participated in the study. The students completed an anonymous digital survey designed to measure the extent to which they used AI for English academic writing assignments as well as their attitudes and beliefs regarding the use of AI for completing such assignments. The data were collected in January 2024. The majority (59%) of the respondents reported their gender as female and 38% reported it as male. Moreover, 51% of the students were in their first study year, 45% were in their second year, and a small number were third- or fourth-year students. Most students expressed moderate or strong confidence in their written English ability, at 50% and 37%, respectively. A descriptive statistical analysis was performed in order to identify patterns and trends in the data.

Results

Research question 1

To determine which AI tools learners used for English academic writing assignments, the respondents were asked how often they made use of five popular writing tools that incorporate AI technologies. The five choices included two machine translation applications (Google Translate and DeepL), an AI chatbot (ChatGPT), an automated written feedback system (Grammarly), and a word processing application with built-in spelling and grammar check functionality (Microsoft Word). Refer to Hofmeyr (2025) for an overview of how AI chatbots and automated feedback systems can be applied for computer-assisted language learning.

The majority of respondents reported having used each of the five AI tools previously, with 80% reporting having used Google Translate. For Microsoft Word’s spelling and grammar check, the number was 76%; for DeepL, it was 74%; for ChatGPT, it was 66%; and for Grammarly, it was 53%. While Google Translate was the application that most respondents had used, only a small minority (18%) reported still using it frequently or always for their English academic writing. Microsoft Word’s spelling and grammar check and Grammarly were the most popular applications by usage frequency, with 50% of learners reporting using the former frequently or always and 41% of learners using the latter. Thirty-six percent of learners reported using DeepL frequently, and only 12% of learners reported using ChatGPT frequently for English writing. The respondents were given the option to list any additional AI software that they use for English academic writing, but no additional popular AI applications were identified. Figure 1 shows the reported frequency of use for each of the five applications.

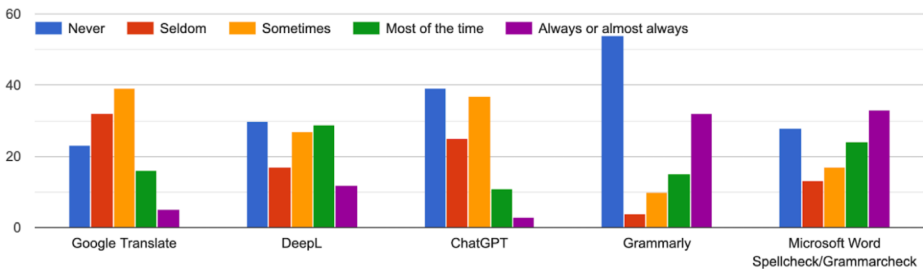


Figure 1. Frequency of use of five popular AI-powered writing tools.

Research questions 2 and 3

To answer Research Question 2, the respondents were asked to indicate for which purposes they generally made use of AI tools in their academic writing. A list of ten purposes was provided, with seven purposes related to the use of AI tools to improve the linguistic form of the L2 output and three purposes related to the use of such tools to generate or organise the meaningful content of the written output. Subsequently, in order to answer Research Question 3, the respondents were asked whether or not they thought that the use of AI tools for each of the same 10 purposes constituted academic dishonesty.

The learners reported using AI tools predominantly for purposes related to improving the form of their L2 output, with most learners saying that they generally use such tools to translate individual words (59%), to translate parts of sentences (57%), to display alternative vocabulary or grammatical structure options (57%), to identify spelling errors (69%), and to identify grammatical errors (65%). About one-third of the learners reported generally using AI tools to translate complete sentences or paragraphs (30%) and to make suggestions for improving their L2 grammar (28%). A smaller but substantial number of learners reported using AI tools to generate content ideas (22%) or a structure (10%) for their writing assignments. A small minority of the respondents (3%) confessed to regularly using AI tools to generate entire essays or other writing assignments.

Four of the uses of AI tools were deemed academically dishonest by the majority of the learners. These included the translation of complete sentences or paragraphs (72%), the generation of content ideas for writing assignments (62%), structuring the content of a writing assignment (71%), and generating an entire writing assignment (91%). Four more uses of AI tools were considered academically dishonest by a substantial minority, namely translation of individual words (29%), translation of parts of sentences (30%), displaying alternative vocabulary or grammatical structure options (18%), and making suggestions on how to improve grammar (11%). Small minorities of learners also considered the use of AI tools to identify spelling (5%) and grammatical errors (7%) in written output to be dishonest. Table 1 below provides a summary of the data on AI tool usage and on learners' perceptions concerning academic honesty.

Table 1. Learners' use of AI for English academic writing and their perceptions of academic honesty.

Use of AI tools	Proportion of learners who use AI tools in this way	Proportion of learners who consider this usage to be academically dishonest
L2 form purposes		
1 To translate individual words	59%	29%
2 To translate parts of sentences	57%	30%
3 To translate complete sentences or paragraphs	30%	72%
4 To show alternative options for vocabulary choice or grammatical structure	57%	18%
5 To identify spelling errors in writing	69%	5%
6 To identify grammatical errors in writing	65%	7%
7 To make suggestions on how to improve grammar	28%	11%
Content generation or structuring purposes		
8 To generate content ideas for an essay or writing assignment	22%	62%
9 To generate a structure for an essay or writing assignment	10%	71%
10 To generate an entire essay or writing assignment	3%	91%

Research question 4

To find out whether the learners believed that AI tools could improve their skill and confidence in English writing, they were asked to state to what extent they agreed with a number of statements. In total, 93% of the respondents indicated the belief (responses of somewhat agree to strongly agree) that AI tools could help them to produce better written output in English. A slightly smaller proportion (82%) expressed the view that the tools could help them to produce higher quality written work and that using the tools would improve their written English proficiency in general. Seventy-one percent stated that the use of AI tools increased their confidence in their English writing ability. These results indicate that a large majority of the learners believed that AI tools were useful not only for helping them to produce better English writing but also to increase their general proficiency and confidence in their ability to write in English. Figures 2 to 4 below show a more detailed breakdown of the learners’ beliefs regarding AI and writing proficiency.

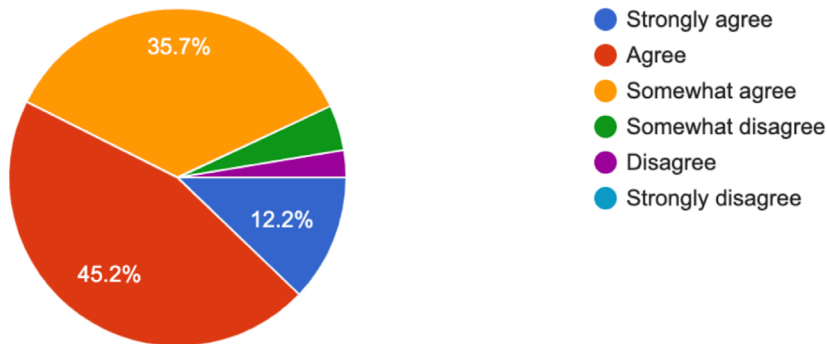


Figure 2. Learners’ agreement with the following statement: “When I use AI writing tools, the quality of my English writing output improves.”

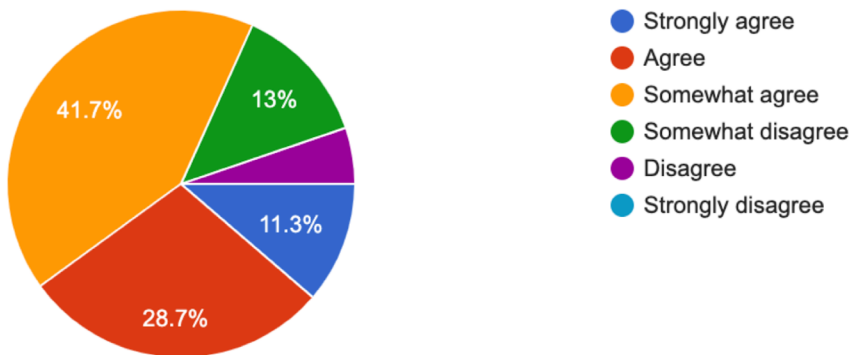


Figure 3. Learners’ agreement with the following statement: “Using AI writing tools improves my English writing proficiency in general (i.e., even when I stop using the tools).”

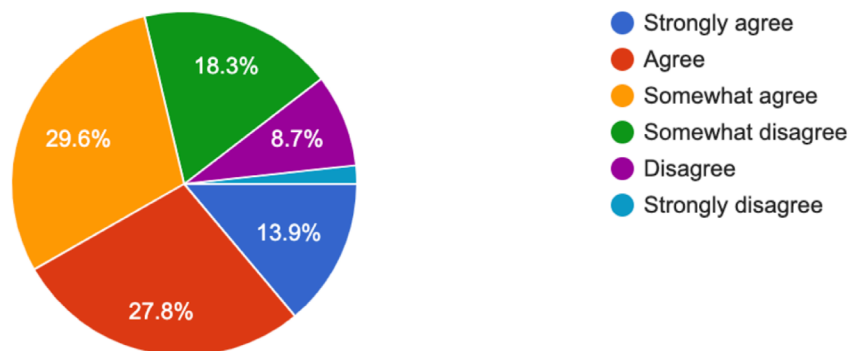


Figure 4. Learners' agreement with the following statement: "Using AI writing tools increases my confidence in writing in English."

Discussion

An analysis of the survey data reveals that most of the learners had made use of all five of the popular AI tools included as options in the survey, including ChatGPT, which had, by the time of gathering the data, been available for a little over a year. However, only a minority of learners indicated that they used machine translation software or AI chatbots regularly for English writing assignments. Half of the learners stated that they regularly made use of Microsoft Office's spelling and grammar check for writing assignments, and a slightly smaller proportion said the same for the automated written feedback system Grammarly. If these usage patterns are representative of Japanese university students in general, then the results would suggest that most learners in Japan have tried a range of AI tools, and that DeepL, Grammarly, and Microsoft Word are their preferred applications. Feedback on spelling and grammar, provided by both Microsoft Word and Grammarly, appears to be the most popular way to use AI for writing assistance.

The data also reveal that a substantial proportion of learners – a majority, in several cases – regularly use AI tools in a variety of ways to help them improve the form of their L2 output in academic English writing. However, only a small portion of learners admitted to regularly using such tools to generate ideas or to structure the content of their written work. When asked for what purposes the employment of AI tools constituted academic misconduct, most learners expressed the view that the identification of L2 language errors, suggestions for improvement, and translations of small portions of text was not dishonest. However, a majority of learners felt that using the tools to translate or generate large chunks of L2 output, to generate new ideas, or to generate or structure an entire written assignment was dishonest. One surprising, and perhaps unsettling, finding is that nearly one in ten learners indicated that it is not dishonest to generate entire written assignments using AI tools. A possible explanation may be that even though the English proficiency of the respondents was relatively high, some may have misunderstood the statement.

Finally, the results indicate a general belief among learners that AI tools can effectively help them to write higher quality English output. Furthermore, they believe

that using such tools can develop their academic English writing ability on the whole, as well as strengthen their confidence in their writing proficiency.

Conclusion

The results of this small-scale survey study suggest that most university-aged learners of English in Japan already use AI tools at least occasionally in their academic writing assignments, and that they generally view the use of such tools in a language-learning context in a positive light. Learners consider AI tools to be an important aid in the production of L2 writing output and also an effective means of improving their English language proficiency. Their acceptance and enthusiastic adoption of these powerful new technologies will encourage computer-assisted language learning researchers and practitioners who have drawn attention to the benefits that these applications, as well as emergent AI-based pedagogical practices, may hold for language learning.

Furthermore, it is encouraging to see that the learners themselves are broadly aware of the ethical and pedagogical concerns surrounding an over-reliance on AI. It needs to be noted that this study only provides a partial view of learners' attitudes, as all of the data were collected at a single institution from respondents all enrolled in a degree programme with a humanities and social sciences focus. In order to improve the generalisability of the findings, it will be necessary to carry out additional studies among a larger range of learners in and outside of Japan. As AI seems set to play an increasingly large role in the academic and professional worlds, monitoring the attitudes and practices among learners and also among teachers and other stakeholders will continue to be an important area of research.

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Author biodata

Michael Hofmeyr is a junior associate professor at Tokyo University of Science. He has published peer-reviewed articles and book chapters on various topics in applied linguistics and regularly presents his research at major CALL conferences. Michael currently serves as the JALTCALL publications chair and as editor-in-chief of *JALTCALL Trends*.