

LANGUAGE STUDENTS' PERCEPTIONS OF LEARNING CAT TOOLS IN TRANSLATION COURSE IN THE AI ERA: A SURVEY STUDY

Linh Pham Mai ¹, Yen Duong Hong ²,

¹ School of Foreign Languages - Thai Nguyen University, Vietnam

² School of Foreign Languages - Thai Nguyen University, Vietnam

ABSTRACT

This study investigates language students' perceptions of learning Computer-Assisted Translation (CAT) tools in Translation courses in the era of Artificial Intelligence (AI). Employing a questionnaire distributed to 63 English-major students at a university in Vietnam, the study examines students' familiarity with CAT tools, their perceived usefulness, attitudes towards integrating CAT tools and AI, as well as challenges encountered during learning. The findings reveal that most students hold positive attitudes towards CAT tools, acknowledging their role in improving translation speed, consistency, and quality. At the same time, students demonstrate strong awareness of AI technologies and support the integration of both CAT tools and AI in translation training. However, moderate confidence levels and limited exposure indicate the need for more practical training. Notably, a minority of students questioned the necessity of CAT tools in the AI era. The study highlights the importance of balancing technological competence and linguistic skills and recommends enhancing hands-on practice and integrating AI-supported tools in teaching.

Keyword: CAT tools, AI, translation training, student perceptions, language students

1. INTRODUCTION

Translation has long played a vital role in facilitating cross-cultural communication in an increasingly globalized world. In the context of the Fourth Industrial Revolution (Industry 4.0), the rapid development of Artificial Intelligence (AI) has significantly transformed translation practices, introducing new tools and reshaping professional expectations.

Computer-Assisted Translation (CAT) tools, which include features such as translation memory and terminology management, have traditionally been considered essential in translation training and professional workflows. However, the emergence of AI-powered tools such as machine translation systems and ChatGPT has raised questions regarding the continued relevance of CAT tools.

Several scholars have examined the impact of technology on translation and interpreting. Pym (2011) argued that technological developments reshape translation practices rather than replace human translators. Similarly, Fantinuoli (2018) emphasized the importance of integrating technological tools into translation and interpreting workflows. Ehrensberger-Dow et al.

(2020) further demonstrated that professional translators increasingly rely on digital resources, including CAT tools and terminology databases.

Recent studies have also explored students' perceptions of translation technologies. Nguyen and Le (2022) found that Vietnamese students generally have positive attitudes towards translation tools but lack confidence in their practical application. Fan (2023) reported that students appreciate translation technologies while experiencing difficulties in using them effectively in real-world contexts. The growing role of artificial intelligence in translation and education has also been widely discussed in recent studies (Kasneci et al., 2023; UNESCO, 2023).

In the Vietnamese context, Phan (2023) highlighted that students value the convenience of AI tools but are concerned about overdependence and reduced critical thinking. Similarly, Nguyen (2023) identified persistent challenges in translation and interpreting training, including vocabulary limitations and processing difficulties.

Despite these contributions, there remains a lack of research focusing specifically on students' perceptions of learning CAT tools in relation to the

rapid development of AI. Understanding these perceptions is crucial for designing effective and future-oriented translation training programs.

Therefore, this study aims to investigate students' perceptions of learning CAT tools in Translation courses in the AI era. The study addresses the following research questions:

1. What are students' perceptions of their competence in using CAT tools?
2. How do students evaluate the usefulness of CAT tools?
3. What are students' attitudes towards integrating CAT tools and AI in translation training?
4. What challenges do students encounter, and what improvements do they suggest?

2. METHODOLOGY

2.1. Participants

The participants in this study are 63 students majoring in English language who have taken CAT tools as part of their Translation course. The participants were selected based on convenience sampling and voluntarily participated in the study.

2.2. Research instrument

A structured questionnaire was designed using Google Forms. The survey consisted of 27 questions in multiple-choice, Likert-scale, and open-ended formats. It was divided into four sections: (1) background information, (2) experience with CAT tools, (3) perceptions of CAT tools, and (4) challenges and suggestions.

2.3. Data collection and analysis

Data were collected over a one-week period. Quantitative data were analyzed using descriptive statistics such as percentages and frequencies. Responses to open-ended questions were analyzed thematically to identify recurring patterns and viewpoints.

3. FINDINGS AND DISCUSSION

3.1. Students' familiarity with CAT tools

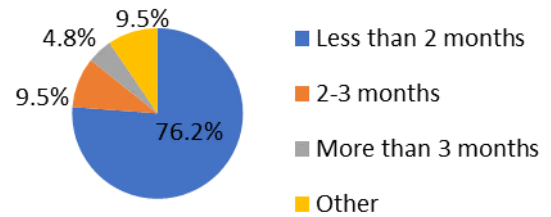


Figure 1 Duration of students' experience with CAT tools

The results indicate that students have relatively limited exposure to CAT tools. A majority of 76.2% reported that they had learned CAT tools for less than two months.

Despite this limited experience, students demonstrated moderate familiarity with basic functions. Approximately 76.2% rated their familiarity with basic features at high levels, and around 71.4% reported understanding translation memory functions.

However, students' confidence remains moderate, with only 52.4% expressing high confidence in using CAT tools for translation tasks.

3.2. Perceived usefulness of CAT tools

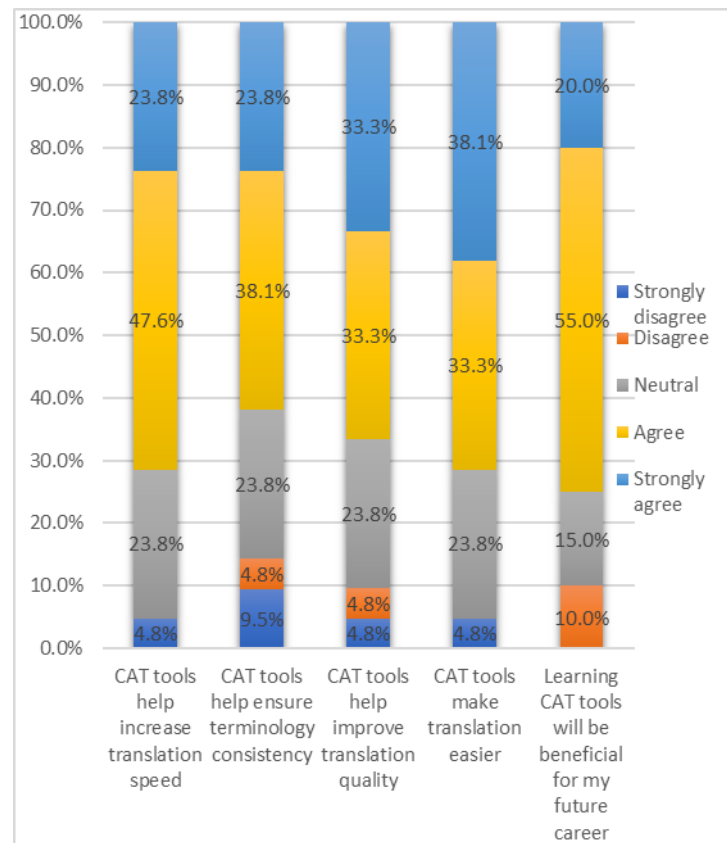


Figure 2 Students' perceptions of the usefulness of CAT tools

Students generally expressed positive perceptions of CAT tools. A majority of 71.4% agreed that CAT tools help increase translation speed, while 61.9% believed that they improve translation quality and ensure terminology consistency.

Additionally, about 70% agreed that CAT tools make translation tasks easier, and 75% believed

that learning CAT tools would be beneficial for their future careers.

3.3. Ease of use and learning experience

Regarding usability, 66.7% of students agreed that CAT tools are relatively easy to learn and have understandable interfaces. However, a notable proportion of neutral responses suggests that students still require more practice and guidance.

3.4. Attitudes toward integrating CAT tools and AI

	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)
I like learning CAT tools in translation courses.	4,8	4,8	28,6	38,1	23,8
CAT tools should be incorporated into translation training programs.	4,8	9,5	19	38,1	28,6
Learning CAT tools is an important skill for language students.	4,8	4,8	19	38,1	33,3
I would like to learn more about other translation technologies.	4,8	0,0	19	42,9	33,3
AI-powered translation tools are becoming increasingly popular.	0,0	0,0	4,8	23,8	71,4
CAT tools remain important despite the rapid development of AI.	0,0	4,8	23,8	38,1	33,3
Translation students should learn both CAT tools and AI translation tools.	0,0	4,8	23,8	38,1	33,3

Figure 3 Students' attitudes toward CAT tools and AI in translation

The findings reveal strong support for integrating CAT tools into translation training. Around 66.6% of students agreed that CAT tools should be included in the curriculum, while over 71% considered them essential skills.

At the same time, students demonstrated high awareness of AI technologies. A significant 95.2% agreed that AI tools are becoming increasingly popular. Importantly, 71.4% believed that CAT tools remain important despite the rise of AI, and most students supported learning both CAT tools and AI tools.

3.5. Challenges and expectations

Students reported several challenges, including limited practice opportunities, unfamiliarity with advanced features, and technical difficulties.

Interestingly, a small number of students expressed the opinion that CAT tools should be reduced or even removed from the curriculum, as they perceived AI-powered tools to be more efficient and easier to use. This perspective, although representing a minority, reflects emerging concerns about the relevance of traditional translation technologies in the AI era.

To improve learning outcomes, students suggested increasing hands-on practice, providing clearer instructions, and integrating real-world

translation tasks, as well as combining CAT tools with AI technologies.

3.6. Discussion

The findings of this study are consistent with previous research indicating that students generally hold positive attitudes toward translation technologies while facing challenges in practical application (Fan, 2023).

Students' recognition of the usefulness of CAT tools supports the argument that technological competence is essential for modern translators (Fantinuoli, 2018). However, the moderate confidence levels observed align with Nguyen and Le's findings that students often lack practical experience (Nguyen & Le, 2022).

Notably, a minority of participants suggested that CAT tools should be reduced or removed due to the increasing dominance of AI tools. This finding highlights an emerging tension between traditional translation technologies and AI-driven tools. While most previous studies emphasize the continued relevance of CAT tools (Fantinuoli, 2018; Fan, 2023) this result suggests that some students perceive AI as a potential replacement rather than a complementary tool.

This perception may stem from the accessibility and convenience of AI tools, which typically require less technical expertise than CAT tools. However, such views may overlook the professional advantages of CAT tools, particularly in ensuring consistency, managing large-scale projects, and maintaining translation quality.

Therefore, this finding underscores the importance of guiding students to develop a balanced understanding of both CAT tools and AI technologies, rather than favoring one over the other.

4. CONCLUSION

This study has provided valuable insights into language students' perceptions of learning CAT tools in Translation courses in the AI era. The findings indicate that students generally hold positive attitudes toward CAT tools and recognize their practical benefits. However, their confidence and practical competence remain moderate due to limited exposure.

Importantly, while a minority of students questioned the necessity of CAT tools, the majority

supported their integration alongside AI technologies. This suggests the need for a balanced and adaptive curriculum that incorporates both CAT tools and AI while maintaining core linguistic competencies. Future research should involve larger samples and examine changes in students' perceptions over time.

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