Mapping Translation Students’ Interaction with AI Tools

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Abstract

Artificial intelligence is increasingly present in Translation classes, reshaping how students work and how translation competence is understood. This proposal presents a classroom-based exploratory study of how translation students at different educational levels use and perceive AI-based tools. The study involved third-year undergraduate students in Translation and Master’s students in Specialized Translation at the University of Aveiro, using two questionnaires with closed and open-ended questions to compare frequency of use, preferred tools, purposes, and attitudes toward AI-assisted translation. Results suggest differences between educational levels: undergraduate students report broader and more exploratory uses, while Master’s students adopt more specialised and task-oriented practices, especially for terminology, pre-translation research, and post-editing. Overall, the study highlights the need for pedagogical approaches that promote critical digital literacy, ethical awareness, and responsible AI use in translator education.

The impact of AI on the translation teaching

Translation has undergone a profound technological transformation over the last four decades. Traditional documentation practices based on printed dictionaries and reference materials have gradually evolved into digital and networked environments (Alcina Caudet et al., 2005; Austermühl, 2001). The development of computer-assisted translation (CAT) tools, translation memories, terminology management systems, and machine translation (MT) significantly reshaped professional workflows and translator training (Chan, 2023; Austermühl, 2011). A major milestone was the emergence of Neural Machine Translation (NMT), which surpassed earlier statistical approaches (Stahlberg, 2020). This evolution strengthened the relationship between translators and technology, leading O’Brien (2012, p. 4) to describe the translation profession as “almost symbiotic with the machine”. The integration of MT and post-editing into professional practice has generated considerable debate, with scholars highlighting both productivity gains and potential risks for language learning and critical thinking (Kenny, 2022; Nitzke et al., 2024). The arrival of large language models (LLMs) and generative AI systems introduced a new stage in translation technology.

Beyond producing translations, these tools can generate stylistic adaptations, explanations, and multimodal outputs, expanding the possibilities of translation workflows (Li et al., 2024). Recent years have witnessed a significant increase in scholarly attention to this technology and the challenges it poses (Floridi, 2023; O’Brien, 2024; Jimenez-Crespo, 2024). The increasing integration of AI into translation education raises important questions about how technological innovation can be balanced with the development of core translation competences (Sánchez-Castany, 2023). Massey & Ehrensberger-Dow, (2026, p. 19) highlight the development of specific transferable skills, such as "critical thinking, adaptivity, creative problem-solving, cognitive and emotional self-regulation", among others. According to Inglada (2026), the advent of gen AI reinforces the relevance of fundamental translation skills, suggesting that these competences are now more important than ever in translator education (p. 51). However, its effective integration into translation pedagogy remains underexplored, underscoring the need to examine students’ experiences, practices, and perceptions.

Methodological approach

Two questionnaires with parallel structures were developed to examine BA and MA students’ use and perceptions of AI in translation. Adapted to the profiles of third-year undergraduate Translation students and Master’s students in Specialized Translation, each questionnaire consisted of eleven questions combining closed-ended, multiple-answer, Likert-scale, and open-ended formats, allowing the collection of both quantitative and qualitative data. The questionnaires were designed using Google Forms, distributed online, and completed during class sessions. Participation was voluntary and anonymous.

The undergraduate questionnaire explored students’ use of AI in academic work and translation classes, focusing on tools, tasks, stages of the translation process, trust in AI-generated output, and perceived advantages and disadvantages. The Master’s questionnaire followed the same structure but focused on Specialized Translation, examining AI use in professional contexts, confidence in AI output, attitudes toward AI, and reflections on translator competences in AI-assisted translation.

Results

The questionnaires revealed differences between BA (N = 23) and MA (N = 16) students regarding AI use, trust, workflow integration, and perceptions of its role in translation (Fig. 1). Most BA students (78%) considered AI useful for translition-related tasks, while all MA students (100%) considered it useful for Specialized Translation. Among BA students, AI was used mainly occasionally (56.5%), with only isolated cases of very frequent use. MA students showed more varied patterns: 25% reported very frequent use, 18.8% frequent use, 31.2% rare use, and 25% occasional use.

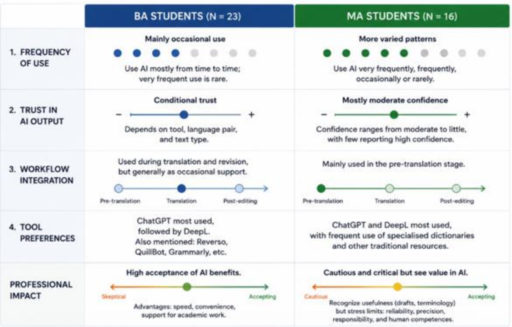

Fig.1 Contrasting AI Use in Translation: BA vs MA Students.

Trust in AI-generated output was generally conditional among BA students, depending on factors such as the tool employed, language pair, and text type. Among MA students, 62.5% reported moderate confidence, 25% little confidence, and 12.5% high confidence. Their comments frequently referred to issues of accuracy, terminological precision, and the handling of culture-bound elements.

Regarding workflow integration, MA students reported using AI mainly during the pre-translation stage (43.8%), followed by post-editing (31.3%), while only 25% systematically used AI during translation itself. BA students also used AI during translation and revision, although generally as occasional support rather than as a regular component of the workflow.

ChatGPT was the most frequently used tool in both groups, followed by DeepL. Among BA students, more than 70% reported using AI for translation tasks, and many also used it for summarising texts, searching for information, clarifying doubts, grammatical correction, and stylistic improvement. MA students demonstrated more selective use of AI tools and referred more frequently to traditional documentation resources, including specialised dictionaries. BA students highlighted advantages such as speed, convenience, and support for academic work. MA students also recognised the usefulness of AI, particularly for draft generation and terminology support, but emphasised limitations related to reliability, precision, professional responsibility, and the continued importance of translation competences.

Conclusions

This study found significant differences between BA and MA Translation students in their use and perception of AI. BA students generally use AI as a broad academic support tool for summarising, retrieving information, and assisting with translation, while MA students adopt a more selective and professionally oriented approach, mainly using AI in pre-translation and post-editing. Trust in AI output remains conditional for both groups, but MA students show greater awareness of its limitations, risks, and the continued importance of human expertise. The findings support the need for critical evaluation, documentation, and strategic skills. They also suggest that translation pedagogy should not simply restrict AI use, but guide students toward critical, ethical, and responsible integration of these tools.

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