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Computer-Assisted Translation and ChatGPT: A Case Study in Teaching English-French Translation at Euromed University of Fès

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Abstract

This study investigates the integration of ChatGPT-4, an AI language model, in translation tasks within a classroom environment, focusing specifically on English-French translation activities performed by 13 students. Employing a mixed-methods approach, data were collected through focus groups, classroom observations, reflective journals, and semi-structured questionnaires to gain a comprehensive understanding of students' perceptions, interaction patterns, and learning strategies when engaging with AI-assisted translation tools. The findings reveal that a majority of students perceived ChatGPT-4 as a useful resource for vocabulary and syntax suggestions, often utilizing it primarily as a reference or drafting tool to support their initial translations. Despite these advantages, participants widely acknowledged the necessity for thorough post-editing, as ChatGPT-4 frequently produced literal or semantically inaccurate translations requiring correction. The use of ChatGPT-4 also encouraged students to develop critical thinking and editing skills by engaging more actively in evaluating and refining AI-generated outputs. While some students initially exhibited skepticism or anxiety about relying on AI, their confidence in using the tool grew with practice, highlighting the emotional and pedagogical challenges involved in adopting new technologies. Concerns about potential overreliance on AI were also expressed, underscoring the need for balanced integration. Overall, the study emphasizes the pedagogical potential of ChatGPT-4 as a complementary tool that supports but does not replace human judgment in translation education. It advocates for guided instruction to enhance AI literacy and maintain translation quality.

1. INTRODUCTION

In recent years, the rapid development of artificial intelligence (AI) tools has profoundly influenced the way languages are taught and learned in academic contexts. One of the most notable examples is ChatGPT-4, an advanced language model that is increasingly being integrated into language education, particularly in the field of translation studies. This evolution is reshaping not only how translation is practiced, but also how it is taught to students in higher education.

At Euromed University of Fès, within the Faculty of Translation, English-French translation courses have begun incorporating AI-driven tools such as ChatGPT-4 alongside traditional computer-assisted translation (CAT) software. This integration reflects a growing pedagogical interest in equipping students with both linguistic competence and technological literacy. The use of AI in translation pedagogy opens up new possibilities in terms of efficiency, critical engagement with language, and the development of students' metalinguistic awareness.

This paper aims to explore the implementation and pedagogical value of ChatGPT-4 as a support tool for teaching French-English translation. By analyzing classroom practices, student feedback, and translation outputs, the study seeks to assess the benefits and limitations of using ChatGPT-4 in comparison with traditional CAT tools.

The research is guided by the following questions:

- How is ChatGPT-4 currently used to assist French-English translation tasks at Euromed University of Fès?
- What are the perceived advantages and drawbacks of using ChatGPT-4 from both student and instructor perspectives?
- In what ways does the integration of ChatGPT-4 influence students' translation competence and critical thinking?

2. LITERATURE REVIEW

Translation is a complex professional practice that requires more than just bilingual proficiency; it demands a multifaceted set of skills involving linguistic expertise, cultural understanding, and ethical awareness. Translation professionals must act as cultural mediators, carefully navigating between source and target cultures to preserve meaning and nuance. This is especially critical in literary and cultural translation, where maintaining cultural references is key to effective communication (Gouadec, 2007; Elewa, 2021).

Technological advancements have significantly transformed the field of translation, both in professional practice and education. The use of educational multimedia technologies fosters the development of professional foreign language competence by creating interactive and engaging learning environments, which enhance both linguistic abilities and subject knowledge (Bobrova et al., 2021). In particular, the integration of translation memories with statistical models within computer-assisted translation (CAT) tools has been shown to improve the efficiency and consistency of human translators, streamlining workflows without sacrificing quality (Barrachina et al., 2009). Students generally have a positive attitude toward CAT tools, appreciating their ability to enhance translation quality and workflow efficiency. These tools support accuracy, speed, and consistency, all of which are critical in both learning and professional contexts (Mahdy et al., 2020; Çetiner, 2018; Chunzhi, 2014). Understanding translation as a distributed cognitive process highlights the dynamic interaction between translators and digital resources, where the use of CAT tools actively shapes cognitive load and translation strategies (Dragsted, 2006). Incorporating CAT technology into translator training programs bridges the gap between theoretical knowledge and practical application. Hands-on experience with CAT tools enhances students' professional skills and deepens their understanding of the translation process (Erwen & Wenming, 2013; Juan & Yahaya, 2019). These systems combine translation memories, termbases, and interactive interfaces to support

translators in producing higher-quality output more efficiently (García, 2014). Moreover, teaching CAT tools in formal programs fosters improvements not only in technical handling but also in cognitive strategies, significantly contributing to students' overall translation competence (Akgün & Mercan, 2023).

Beyond CAT tools, the advent of machine translation (MT) and large language models (LLMs) like ChatGPT is redefining translation practice. Post-editing of machine-translated texts is influenced by translators' proficiency in the target language, with higher L2 proficiency leading to more accurate and fluent results (Chung, 2020). While machine translation enhances speed and efficiency, human translators remain indispensable for ensuring accuracy and capturing cultural nuances that machines cannot fully grasp (Zong, 2018).

Large language models demonstrate promising advancements in computational linguistics, offering diverse approaches that impact translation quality. ChatGPT, for instance, excels in contextual understanding and conversational fluency, while traditional tools like Google Machine Translation focus more on speed (Mohammed, 2023; Alafnan, 2024). The design of prompts plays a critical role in optimizing ChatGPT's translation accuracy, as shown by empirical studies which demonstrate that carefully formulated prompts yield better output quality (Gao, Wang, & Hou, 2023).

The latest iterations of ChatGPT, especially those powered by GPT-4, show significant improvements in translation accuracy and fluency compared to previous models (Jiao et al., 2023). Furthermore, incorporating error analysis prompts enables these models to evaluate translations with a level of judgment similar to human evaluators, opening new possibilities for automated translation quality assessment (Lu et al., 2023).

University students generally perceive ChatGPT as a useful and user-friendly tool for translating texts, reflecting growing acceptance of AI in academic contexts (Roza & Zulhirawati, 2023). The Unified Theory of Acceptance and Use of Technology (UTAUT) model confirms that perceived usefulness and ease of use are key factors driving students' willingness to adopt ChatGPT in translation tasks (Wang, Xu, & Liu, 2024). Nevertheless, the introduction of ChatGPT in educational settings presents challenges. While it can enrich learning experiences, unregulated use risks fostering overreliance and may undermine critical thinking and academic integrity (Tlili et al., 2023). The dual nature of ChatGPT in education requires careful management to maximize benefits while addressing ethical concerns.

In the broader field of natural language processing, ChatGPT's strengths and limitations are still being explored. Its broad applicability and potential are clear, but continuous research is necessary to fully understand its capabilities and appropriate uses, especially in translation (Hariri, 2024). It is crucial to view AI tools not as replacements for human translators but as complementary instruments that augment human expertise and creativity.

Taken together, these insights reflect an evolving translation profession where traditional human skills are enhanced through technological innovation. The integration of CAT systems and AI models such as ChatGPT provides opportunities to improve translation quality, efficiency, and evaluation. However, achieving this balance requires thoughtful pedagogical strategies and ethical oversight to prepare translators for the complexities of a technology-augmented future.

3. METHOD

This study aims to examine the integration of ChatGPT-4 into a Computer-Assisted Translation (CAT) classroom dedicated to English-French translation at Euromed University of Fès. The research specifically focuses on exploring the effectiveness of ChatGPT-4 as a pedagogical tool to support translation tasks between English and French. Furthermore, it seeks to analyze how students interact with the AI system during translation exercises, paying close attention to their strategies, behaviors, and levels of engagement. Additionally, the study aims to identify the advantages, limitations, and any resistance perceived by students when using ChatGPT-4 throughout the translation process. By addressing these objectives, the research intends to contribute to a deeper understanding of the pedagogical role of generative AI tools in translation education, emphasizing their practical applications, user perceptions, and overall educational impact.

3.1.Participants and Procedures

The study involved 13 undergraduate students, aged between 20 and 21, enrolled in the third year of the Bachelor's program in Translation within the Faculty of Humanities and Social Sciences at Euromed University of Fès, Morocco. The research was conducted within the framework of the module "Computer-Assisted Translation (CAT): English to French", which focuses on the translation of tourism-related and legal texts using digital tools. All participants are native Arabic speakers; some of them are bilingual in Arabic and French, reflecting the linguistic reality of Morocco. French is their second language, and English is their third, in accordance with the country's multilingual education system. The participants had prior experience in both English and French translation, but limited or no exposure to AI-assisted translation before this course.

This study follows a qualitative exploratory design aimed at investigating how ChatGPT-4 can be integrated into the English-French translation classroom. The experiment spanned six weeks, during which students participated in a series of carefully planned activities to engage with the AI tool. Students carried out translation sessions using ChatGPT-4, either during in-class activities or as homework assignments. In these sessions, they submitted English source texts and received machine-generated French translations, which served as a starting point for their work. Following the initial translation, students engaged in post-editing tasks, where they critically reviewed and refined the AI-produced output to enhance accuracy, fluency, and stylistic appropriateness. This step encouraged deeper interaction with both the language and the technology. Moreover, regular collective discussions were held throughout the experiment. These sessions provided a platform for students to share their translation outcomes, exchange strategies, and reflect collectively on the advantages and challenges encountered when working with ChatGPT-4. This combination of practical work and group reflection allowed for a comprehensive exploration of ChatGPT-4's pedagogical potential in supporting translation learning.

3.2.Instruments

To gather comprehensive insights into the use of ChatGPT-4 in the translation classroom, multiple data collection techniques were employed. At the conclusion of the study, a final focus group was conducted to encourage in-depth discussion and collective reflection

among participants. Alternatively, the group was divided into two smaller focus groups to facilitate more intimate and detailed conversations.

In addition to focus groups, classroom observations were carried out throughout the experiment to capture real-time student interactions and behaviors during translation sessions. Some participants also maintained reflective journals, providing personal accounts of their experiences and challenges while working with the AI tool.

Furthermore, a semi-structured questionnaire was administered to collect individual opinions and attitudes regarding the effectiveness, advantages, and limitations of ChatGPT-4 in the translation process. This mixed-methods approach enabled a rich and nuanced understanding of the pedagogical implications of integrating AI into translation education.

4. RESULTS

The analysis of the data collected through focus groups, classroom observations, reflective journals, and the semi-structured questionnaire revealed several key findings related to students' interaction with ChatGPT-4 in the context of English-French translation tasks.

4.1. Perceived Usefulness and Effectiveness

Most students expressed a positive attitude toward the use of ChatGPT-4, particularly in the early stages of the translation process (11 out of 13; 84.6%). They reported that the tool facilitated their understanding of complex source texts and offered helpful suggestions for vocabulary and syntactic structures. According to several participants, ChatGPT-4 served as a valuable reference point and a source of linguistic inspiration, especially when dealing with unfamiliar or specialized terminology. However, 92.3% (12 out of 13) emphasized the necessity of post-editing, noting that the output often required corrections to improve accuracy and stylistic appropriateness.

> *"ChatGPT gave me a good first draft, but I had to rework the sentence structure to sound more natural in French."* (Student 7, focus group)

4.2. Development of Critical Thinking and Editing Skills

The integration of post-editing tasks encouraged students to engage more critically with both the source and target texts. Many participants (69.2%) reported an increased awareness of translation strategies and linguistic nuances as they identified and corrected ChatGPT-4's inaccuracies. This process also highlighted the importance of human intervention in ensuring translation quality.

> *"It made me more conscious of my choices. I had to think about why something felt wrong or too literal."* (Student 3, journal entry)

4.3. Interaction Patterns and Learning Strategies

Observations during in-class sessions showed varying degrees of interaction with the AI system. Some students (38.5%) relied heavily on the machine-generated output, while others

(46.2%) used it more selectively, treating it as one of several resources. A few students (23.1%) experimented with prompt engineering—adjusting the input text to obtain more contextually accurate translations—demonstrating a growing understanding of how to optimize AI tools in translation practice.

4.4.Challenges and Limitations

Despite the benefits, students also identified several limitations in using ChatGPT-4. These included the generation of overly literal translations (76.9%), occasional semantic inaccuracies (61.5%), and the lack of cultural or domain-specific sensitivity. Furthermore, some participants (46.2%) expressed concerns about overreliance on the tool and the potential for reduced effort in engaging with the source text.

> *"Sometimes it gives translations that are grammatically correct but completely wrong in meaning."* (Student 10, questionnaire)

4.5. Emotional and Pedagogical Impact

The emotional response to using AI in the classroom was mixed. While many students (46.2%) found the experience stimulating and innovative, others (53.8%) reported initial skepticism or anxiety about relying on technology for a traditionally human-centered task. By the end of the six weeks, most students (61.5%) expressed greater confidence in using ChatGPT-4 as a complementary tool rather than a replacement for their own skills. Among the 7 students who reported initial skepticism or anxiety, 5 later reported increased confidence in using ChatGPT-4 after practice, suggesting a shift in perception during the course.

> *"At first, I didn't trust it, but now I see it as a helpful assistant—not a translator."* (Student 5, focus group)

Table 1 presents the categorized responses of 13 students regarding their use of ChatGPT-4 in translation tasks. The table shows various themes, along with the number and percentage of students associated with each theme.

Table 1. Categorized Student Responses to ChatGPT-4 Use in Translation Tasks

Theme	Number of Students (n = 13)	Percentage (%)
Found ChatGPT useful for vocabulary/syntax suggestions	11	84.6%
Used ChatGPT primarily as a reference or draft tool	10	76.9%
Reported improvement in editing and critical thinking	9	69.2%
Practiced prompt engineering to improve output	5	38.5%
Identified issues with literal or semantically inaccurate translations	12	92.3%

Concerned about overreliance on AI	6	46.2%
Felt more confident using AI after practice	8	61.5%
Initially skeptical or anxious	7	53.8%

5. DISCUSSION

The findings of this study highlight several important aspects regarding the integration of ChatGPT-4 in translation education, supported by a robust mixed-methods approach involving focus groups, classroom observations, reflective journals, and semi-structured questionnaires. This triangulation of data sources enriches the understanding of how students interact with AI tools and the pedagogical implications of their use. Firstly, the positive attitude expressed by the majority of students towards ChatGPT-4's usefulness in vocabulary and syntax suggestions confirms the tool's potential as a valuable linguistic resource, especially during the initial drafting stages. This aligns with observations of students using ChatGPT-4 primarily as a reference or draft tool, supporting the idea that AI can facilitate the cognitive load of translators by providing lexical and structural scaffolding. However, the widespread recognition of the need for post-editing and critical evaluation underscores a fundamental limitation of current AI tools: the frequent production of literal or semantically inaccurate translations. This finding, drawn from both student reports and classroom observations, reinforces the pedagogical importance of maintaining human oversight and critical thinking in the translation process. Students' reported improvements in editing skills and increased awareness of translation strategies indicate that engaging with AI output can foster metalinguistic reflection and enhance learners' competence. The variation in interaction patterns, including the practice of prompt engineering by some students, suggests an emerging sophistication in navigating AI tools, revealing an active learning process where students adapt and optimize their inputs to obtain better outputs. This dynamic also points to the need for explicit instruction in effective AI use within translation curricula, promoting digital literacy alongside linguistic skills. Concerns about overreliance on AI and initial skepticism or anxiety among some participants highlight emotional and cognitive challenges associated with integrating new technologies into traditionally human-centered disciplines. The gradual increase in confidence reported after sustained practice indicates that familiarity and guided experience can mitigate these concerns, fostering a balanced view of AI as a complementary assistant rather than a replacement for human translators. Methodologically, the combination of qualitative and quantitative data collection methods allowed for a comprehensive exploration of both behavioral and affective dimensions of AI use. The reflective journals provided personal insights into students' evolving attitudes, while focus groups facilitated collective discussion and peer learning, enriching the dataset beyond what could be captured by questionnaires alone. The study suggests that ChatGPT-4, when used critically and reflectively, can enhance translation teaching by supporting vocabulary acquisition, promoting editing skills, and encouraging strategic interaction with AI tools. However, its limitations necessitate continued emphasis on human judgment and cultural sensitivity. Future research could explore longitudinal impacts and the integration of AI training modules to further empower translation students in the evolving digital landscape.

6. CONCLUSION

This study demonstrates that integrating ChatGPT-4 into translation education offers significant benefits, particularly in enhancing vocabulary support and stimulating critical engagement with texts. Students generally perceived the tool as useful, especially during early drafting stages, while recognizing the necessity of thorough post-editing to address inaccuracies. The mixed-methods approach confirmed that interaction with AI promotes the development of editing skills and strategic thinking, though challenges such as literal translations and concerns about overreliance remain.

Overall, ChatGPT-4 should be viewed as a complementary resource that supports—but does not replace—the translator's expertise. Educators are encouraged to incorporate guided training on effective AI use and critical evaluation to maximize its pedagogical potential. Future research may explore long-term effects on translation competence and the integration of AI literacy within translator education curricula.

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Ethical considerations: No formal ethical approval was required for this study, as it involved only anonymous student feedback and performance data collected during regular coursework. No personal identifiers were used, and the research was conducted in accordance with the principles of the Declaration of Helsinki.

Informed consent: Verbal informed consent was obtained from all participants prior to their inclusion in the study. This method was considered appropriate given the educational context and the non-invasive nature of the data collection. All participants were fully informed about the objectives and procedures of the study, and participation was voluntary.

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Data Availability: The data that support the findings of this study are not publicly available due to ethical and privacy restrictions, but may be made available from the corresponding author upon reasonable request and subject to approval by the relevant ethics committee.

REFERENCES

Akgün, Y., & Mercan, H. (2023). The effects of teaching computer-assisted translation tools in translation and interpreting departments on students' developing translation competence as perceived by lecturers. *Abant Journal of Translation and Interpreting Studies, 1*(1).

Alafnan, M. A. (2024). Large language models as computational linguistics tools: A comparative analysis of ChatGPT and Google machine translations. *Journal of Artificial Intelligence and Technology, 5*, 20–32.

Barrachina, S., Bender, O., Casacuberta, F., Civera Saiz, J., Cubel, E., Khadivi, S., Lagarda, A. L., Ney, H., Tomas, J., Vidal, E., & Vilar, J. (2009). Statistical approaches to computer-assisted translation. *Computational Linguistics, 35*(11), 3–28.

Bobrova, S. E., Popova, E. N., Sizova, Y. S., Orlova, L. N., & Polozhentseva, I. V. (2021). Professional foreign language competence formation using educational multimedia technologies. *International Journal of Education and Practice, 9*(1), 155–170.

Çetiner, C. (2018). Analyzing the attitudes of translation students towards CAT (computer-aided translation) tools. *Journal of Language and Linguistic Studies, 14*(1), 153–161.

Chung, E. S. (2020). The effect of L2 proficiency on post-editing machine translated texts. *Journal of Asia TEFL, 17*(1), 182–193.

Chunzhi, D. (2014). Computer-aided translation in student's practical translation. In *3rd International Conference on Science and Social Research* (pp. 494–497). Atlantis Press.

Dragsted, B. (2006). Computer-aided translation as a distributed cognitive task. *Pragmatics & Cognition, 14*(2), 443–464.

Elewa, A. (2021). *Literary and cultural translation* (6th ed.). Qalam for Translation and Publication.

Erwen, Z., & Wenming, Z. (2013). Application of computer-aided translation technology in translation teaching. *International Journal of Emerging Technologies in Learning, 8*(5), 15–20.

Gao, Y., Wang, R., & Hou, F. (2023). How to design translation prompts for ChatGPT: An empirical study. *arXiv*. https://arxiv.org/abs/2304.00000

García, I. (2014). Computer-aided translation: Systems. In I. García (Ed.), *Routledge encyclopedia of translation technology* (pp. 106–125). Routledge.

Gouadec, D. (2007). *Translation as a profession*. John Benjamins.

Hariri, W. (2024). Unlocking the potential of ChatGPT: A comprehensive exploration of its applications, advantages, limitations, and future directions in natural language processing. *arXiv*. https://doi.org/10.48550/arXiv.2304.02017

Jiao, W., Wang, W., Huang, J. T., Wang, X., & Tu, Z. P. (2023). Is ChatGPT a good translator? Yes with GPT-4 as the engine. *arXiv*. https://doi.org/10.48550/arXiv.2301.08745

Juan, L., & Yahaya, N. B. (2019). Research on application of computer-aided translation to translation teaching. *International Journal of Academic Research in Progressive Education and Development, 8*(4), 795–804.

Lu, Q., Qiu, B., Ding, L., Xie, L., & Tao, D. (2023). Error analysis prompting enables human-like translation evaluation in large language models: A case study on ChatGPT. *arXiv*. https://doi.org/10.48550/arXiv.2303.13809

Mahdy, O. S. M. M. S., Samad, S. S., & Mahdi, H. S. (2020). The attitudes of professional translators and translation students towards computer-assisted translation tools in Yemen. *Journal of Language and Linguistic Studies*, *16*(2), 1084-1095.

Mohammed, O. S. M. (2023). Yemeni Students Utilization of Google Translate for Learning English Language: Use, Advantages, and Disadvantages. *Journal of Social Studies*, *29*(4), 136-156.

Peng, K., Ding, L., Zhong, Q., Shen, L., Liu, X., Zhang, M., Yuaxin, O., & Tao, D. (2023). Towards making the most of ChatGPT for machine translation. *SSRN*. https://doi.org/10.2139/ssrn.4390455

Roza, V., & Zulhirawati, Z. (2023). Higher students' perception of using ChatGPT in translating English texts. *BiCED Proceeding, 1*, 64–73. https://proceedings.uinbukittinggi.ac.id/biced/article/view/278

Tlili, A., Shehata, B., Adarkwah, M. A., Bozkurt, A., Hickey, D. T., Huang, R., & Agyemang, B. (2023). What if the devil is my guardian angel: ChatGPT as a case study of using chatbots in education. *Smart Learning Environments, 10*(1), 1–24. https://doi.org/10.1186/s40561-023-00237-x

Wang, L., Xu, S., & Liu, K. (2024). Understanding students' acceptance of ChatGPT as a translation tool: A UTAUT model analysis. *arXiv*. https://arxiv.org/abs/2406.06254

Zong, Z. (2018). Research on the relations between machine translation and human translation. *Journal of Physics: Conference Series, 1087*, 062046. https://doi.org/10.1088/1742-6596/1087/6/062046