

Conference Name: Singapore International Conference on Teaching, Education & Learning, 03-04 March 2025  
Conference Dates: 03-Mar- 2025 to 04-Mar- 2025  
Conference Venue: The National University of Singapore Society (NUSS), The Kent Ridge Guild House, 9 Kent Ridge Drive, Singapore  
Appears in: PUPIL: International Journal of Teaching, Education and Learning (ISSN 2457-0648)  
Publication year: 2025

Victoriya Sibul, 2025

Volume 2025, pp.292-300

DOI- <https://doi.org/10.20319/ictel.2025.292300>

This paper can be cited as: Sibul, V.(2025). Computer-Assisted Translation and Modern Issues of Teaching Translators. Singapore International Conference on Teaching, Education & Learning, 03-04 March 2025, Proceedings of Teaching and Educational Research Association (TERA), 2025, 292-300

## COMPUTER-ASSISTED TRANSLATION AND MODERN ISSUES OF TEACHING TRANSLATORS

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### Abstract

*The 21st century has been characterised by new challenges affecting different spheres of human society, different types of art, and different types of professional activity. In the rapidly evolving landscape of the translation industry, Computer-Assisted Translation (CAT) tools have become indispensable. These technologies not only enhance the efficiency and accuracy of translation processes but also significantly influence the way translators are educated and trained. As the demand for skilled translators continues to grow, it is essential to address the modern issues associated with teaching translators in the context of CAT. The present study is concerned with the issue of effective integration of training in new technologies in the education of future translators.*

### Keywords:

Computer-Assisted Translation, Machine Translation, Translation Memory, Artificial Intelligence, Teaching Translators

## Introduction

Modern scholars note penetration of new technologies based on AI in different spheres of our life Computer-Assisted Translation (Schwab, 2019). CAT tools have become an integral part of the translation industry, enhancing the efficiency and quality of translation processes (Moneus & Sahari, 2024). However, there are several topical issues and challenges associated with CAT that are worth discussing.

The first issue deals with CAT integration with Machine Translation. The integration of CAT tools with Machine Translation (MT) systems is becoming increasingly common. However, the challenge lies in effectively combining MT outputs with human editing to ensure quality and coherence. Thus, the role of translators is shifting towards post-editing machine-generated translations, raising questions about training, workflow, and the balance between automation and human expertise.

The second issue concerns quality assurance which. It arises the dilemma Consistency vs. Creativity. While CAT tools help to enhance consistency through Translation Memory, they may limit the translator's creativity and flexibility. Ensuring that translations are both consistent and contextually appropriate remains a challenge. Here we have to mention concept of Error Propagation. If a segment in the Translation Memory is incorrect, it can lead to repeated errors across multiple projects. Maintaining high-quality TM databases is crucial.

The third issue highlights User Interface and Experience. usability: as many CAT tools have complex interfaces that can be overwhelming for new users. Improving user experience and accessibility is essential for wider adoption, especially among freelance translators that requires training and support. Providing adequate training and support for users is necessary to maximize the potential of CAT tools. This includes resources for troubleshooting and understanding advanced features.

The fourth issue relates to Data Security and Confidentiality. Translators often handle sensitive information, raising concerns over data security when using cloud-based CAT tools. Ensuring that data is protected and complies with privacy regulations is paramount. Likewise Intellectual Property: There are concerns regarding the ownership of translations and the data stored in CAT systems, especially when using third-party services.

The fifth issue touches problems related to Cost and Accessibility. Affordability is controversial. High costs associated with some CAT tools can be a barrier for freelancers and small translation agencies. Finding cost-effective solutions while maintaining quality is a significant issue. And access to Technology can be disputable. In regions with limited access to technology or internet connectivity, the adoption of advanced CAT tools can be challenging, leading to disparities in the translation market.

The sixth issue moves us to Terminology Management. Consistency in Terminology is the must while working with large scope of material. Effective terminology management is specially crucial for specialized fields. Ensuring that terminology databases are comprehensive and up-to-date can be a challenge, especially in rapidly evolving industries. Managing user-generated terminology can lead to inconsistencies if not monitored properly. Establishing guidelines for terminology contributions is essential.

The seventh issue is about Collaboration and Workflow. Many CAT tools offer collaborative features, but managing workflows among multiple translators can be complex. Establishing clear communication and roles is necessary for successful collaboration. Integrating CAT tools with project management systems can streamline workflows, but challenges remain in ensuring seamless communication and tracking of progress.

And lastly, we have to think about Future of Translation. As CAT tools become more sophisticated, the role of translators is evolving. There is ongoing debate about how translators can adapt to these changes and what skills will be necessary in the future. Moreover, the rise of CAT tools and MT raises ethical questions regarding the quality of translations, the role of human translators, and the standards that should govern the industry (Mohammed et al., 2020).

While Computer-Assisted Translation offers numerous benefits, it also presents various challenges that need to be addressed. Ongoing discussions and developments in technology, training, and best practices will be essential for the future of CAT and the translation industry as a whole including the process of translators teaching.

## **1. The Role of CAT Tools in Translator Education**

CAT tools, such as SDL Trados, memoQ, SmartCat, Wordfast and whole lot of others are designed to aid translators by providing features like Translation Memory (TM), terminology

management, and project management capabilities. The integration of these tools into translator training programmes is of paramount importance for several reasons.

Firstly, the integration of CAT tools into the curriculum provides hands-on training. Consequently, educational programmes for translators now frequently include practical training on popular CAT tools, such as SDL Trados, memoQ, Smartcat and Wordfast. This hands-on experience equips students with the skills they need to use these tools effectively in their future careers.

Furthermore, the integration of CAT tools in coursework provides students with real-world applications, allowing them to engage in translation projects that mirror professional environments, thereby enhancing their comprehension of workflow and project management. Additionally, exposure to CAT tools during training facilitates the development of practical skills that are directly applicable in the workplace, preparing students for real-world scenarios and enhancing their competitiveness in the job market.

CAT tools facilitate students' comprehension of the workflow of translation projects, from initial translation to revision and final delivery, enhancing their organisational and time management skills.

Post-editing of machine translation (MT) is a vital skill in the context of the rise of MT, and educators must teach students how to critically assess and improve machine-generated translations, balancing efficiency with quality (Alotaibi, 2014). However, it is important to note that general ICT competency is a prerequisite for the integration of all the aforementioned elements into our curriculum (Sibul, 2023).

## **2. Modern Issues in Teaching Translators and recommendations**

Despite the advantages offered by CAT tools suggested above, several contemporary issues arise in the context of translator training:

- Technological adaptability: As technology advances, educators face the challenge of keeping their curricula up-to-date. New CAT tools and features emerge regularly, necessitating continuous learning and adaptation from both educators and students. This dynamic environment requires institutions to be flexible and responsive to technological changes. Thus we recommend regular updating tools that are used for translators training.

- **Quality assurance and consistency:** While Translation Memory (TM) does promote consistency through its functions, it can also lead to the propagation of errors. We recommend educators to emphasise the importance of quality assurance and teach students how to maintain high standards in their TM databases, including regular updates and careful management of terminology during their class work with CAT tools.

- **Ethical Considerations:** The use of CAT tools raises ethical questions regarding confidentiality, data security, and the role of human translators in an increasingly automated environment. Following other scholars, we recommend educators to incorporate discussions about ethical practices in translation, ensuring that students understand their responsibilities in handling sensitive information and to acknowledge them with respective legislation (Park, 2024).

- **Access and Affordability:** Not all students have equal access to CAT tools, particularly those from low-income backgrounds or regions with limited technological infrastructure. This disparity can lead to unequal educational opportunities. Institutions need to explore solutions, such as providing access to software licenses or utilizing open-source alternatives.

- **Collaboration and Teamwork:** Modern translation projects often involve collaboration among multiple translators. Thus we recommend educators to teach students how to use CAT tools effectively in team settings, fostering communication and collaboration skills. This includes understanding roles, responsibilities, and the importance of feedback in collaborative environments.

- **Assessment of CAT Skills:** Evaluating students' proficiency in CAT tools can be challenging. Educators need to develop comprehensive assessment methods that not only measure technical skills but also evaluate the quality and effectiveness of translations produced using these tools. This may include practical exams, project submissions, and peer reviews.

- **Lifelong Learning and Professional Development:** The translation industry is characterized by continuous change, and translators must be committed to lifelong learning. Educators should instill a mindset of adaptability and encourage students to engage in professional development opportunities, such as workshops, webinars, and industry conferences.

In the context of competitive dialogue between natural and artificial intelligence in translation activity in the digital era, greater emphasis should be placed on the cultivation of the translator's identity as a specialist in interlingual and intercultural communication. This individual

should possess the capacity to make effective decisions through the application of a systemic, transdisciplinary perspective on translation activity (Gorshkova, 2019)

The evolution of translation in the digital era necessitates a redefined role for translators, who must not only bridge linguistic gaps but also navigate the intricate cultural contexts underlying communication. In this competitive landscape, the translator's identity must be anchored in a profound understanding of both source and target cultures, allowing them to deliver translations that resonate authentically with diverse audiences (Malyuga, E., Shvets, A., & Tikhomirov, I., 2016). This cultural competence is paramount as artificial intelligence continues to evolve, often lacking the nuanced grasp of idiomatic expressions, humor, and contextual subtleties that a skilled human translator can provide.

Furthermore, the demand for effective decision-making in translation has never been more crucial. Translators should engage in critical thinking and apply systemic approaches to their work, considering the broader implications of their translations on intercultural exchange (Malyuga, E. N., 2023). By adopting a transdisciplinary perspective, they can draw insights from various fields such as linguistics, cultural studies, and technology, ensuring their translations are not only linguistically accurate but also culturally relevant.

## **Conclusion**

As the boundaries between human and AI-driven translation continue to blur, the role of the translator must evolve beyond mere linguistic conversion. A professional translator now assumes the position of a cultural mediator, possessing not only linguistic expertise but also a deep understanding of the social, historical, and cultural contexts that shape communication. This requires continuous engagement with diverse cultures and a commitment to lifelong learning, enabling translators to interpret nuances that machines often overlook.

Moreover, fostering a transdisciplinary approach means integrating insights from various fields such as sociology, psychology, and technology into translation practices. By understanding the intricacies of human behavior and societal norms, translators can craft messages that resonate authentically with target audiences, ensuring effective communication that transcends mere words.

In this rapidly changing landscape, translators must also harness technology as an ally rather than a competitor. Utilizing AI tools can enhance efficiency, allowing human translators to

focus on creativity and critical thinking, essential elements that AI lacks. Ultimately, the future of translation lies in a collaborative synergy where human insight complements technological innovation, enriching the art of communication.

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