CULTURALISTICS: Journal of Cultural, Literary, and Linguistic Studies, **10(1), 2026, [21-30]**

Available online at: http://ejournal.undip.ac.id/index.php/culturalistics

Research Article

Received: 08/12/2025; Accepted: 30/06/2026; Published: 30/06/2026

Novice translators' perceptions of AI-assisted translation

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Abstract

This study investigates how novice translators perceive and engage with AI-assisted translation tools, emphasizing their emerging AI literacy and its impact on translation learning. Twelve undergraduate students enrolled in an introductory translation course participated in semi-structured interviews, sharing their experiences with tools such as Google Translate, DeepL, ChatGPT, and Gemini. Data were analyzed thematically to identify patterns in tool usage, perceived benefits and concerns, and attitudes toward AI's role in learning. The findings indicate that novice translators actively experiment with multiple AI tools, often combining them strategically to support vocabulary, grammar, phrasing, and text naturalness. Participants appreciated AI's efficiency and scaffolding potential but expressed concerns about overreliance, skill erosion, cultural inaccuracies, and ethical or privacy issues. Despite these concerns, they consistently viewed AI as a supportive resource rather than a replacement for manual translation, emphasizing the importance of human judgment, critical evaluation, and post-editing. Instructor guidance also played a role in shaping responsible AI use, with mixed stances encouraging careful, reflective engagement. The study underscores the need for translation curricula to incorporate AI literacy, enabling learners to leverage AI's benefits while maintaining foundational skills, autonomy, and ethical awareness. These insights highlight the potential for human-centered, hybrid approaches in AI-integrated translation education.

Keywords: Novice Translators; Perceptions; Artificial Intelligence; Translation; AI literacy.

1. Introduction

For novice translators, the introduction of AI tools brings both opportunities and challenges. As beginners who are still developing their language intuition and translation strategies, they are often more dependent on external assistance and may form inaccurate assumptions about how AI operates. Some may view AI as a reliable authority, others as a convenient shortcut, and still others as a threat to their emerging skills. These beliefs, whether rooted in trust, anxiety, or uncertainty, shape their learning behavior and potentially their long-term professional habits. Understanding how novices think about AI is therefore crucial for designing teaching approaches that encourage critical, rather than passive, engagement with technology.

Although the use of AI in translation education has been widely discussed, research that examines how novice translators conceptualize AI remains limited. Many existing studies (Omar & Salih, 2024; Xu et al., 2024) focus on measurable outcomes, such as translation quality or post-editing performance.

Only a few explore students' underlying mental models, misconceptions, or the emotional responses that influence their choices when interacting with AI tools (Baskara, 2025; Zhang et al., 2025). Because of this gap, educators often lack a clear understanding of the assumptions students bring to the classroom and the kinds of guidance they may need to use AI responsibly.

This study responds to that gap by examining novice translators' perceptions of AI-assisted translation with a particular emphasis on AI literacy. Rather than asking only how often students use AI or how well they translate with it, the study looks closely at what students believe about AI, how they interpret its capabilities, and how these beliefs shape their learning and identity as emerging translators. The findings have practical implications. If students place too much trust in AI output, teachers may need to emphasize verification and post-editing strategies. If students fear losing their skills, educators can offer structured activities that demonstrate how AI can support, rather than replace, human decision-making. Recent work (Baskara, 2025; Yi, 2021) also highlight the importance of teaching students the basics of how AI systems generate language, what biases they may carry, and why errors or cultural distortions occur. Such knowledge can equip learners to approach AI tools with both confidence and caution.

Guided by these concerns, this study seeks to answer the following questions: (1) How do novice translators perceive and understand AI-assisted translation tools? (2) What mental models and misconceptions shape their AI literacy? (3) How do perceived benefits and risks influence their trust and use of AI? and (4) How do these perceptions contribute to their development as translators? By focusing on novices' voices, the study aims to offer insights that can help educators balance the promise of AI with the need to preserve foundational translation skills.

2. Methods

This study adopted a qualitative descriptive design to explore how novice translators perceive the use of AI-assisted translation tools. The qualitative approach was selected because it enables an in-depth understanding of participants' experiences, attitudes, and interpretations within their real-life contexts, making it appropriate for this exploratory topic (Creswell & Poth, 2018; Denzin & Lincoln, 2011). The participants were twelve undergraduate students taking an Introduction to Translation course in the Language and Tourism Department at Politeknik Negeri Sriwijaya. Purposive sampling was applied to select students who met two criteria: (1) having beginner-level translation experience and (2) having used AI-assisted translation tools as part of their coursework. To maintain confidentiality, each participant was assigned an anonymized numerical code (P1–P12).

Data were analyzed using thematic analysis following the procedures outlined by Nowell et al. (2017). The researchers analyzed the summarized responses provided by participants regarding the types of AI tools they used, their purposes, perceived benefits, concerns, and their views on AI's role in learning. By employing thematic analysis procedures, the researchers conducted open coding to identify recurrent meanings across participants' descriptions, such as efficiency, convenience, fear of skill decline, ethical concerns, and preferred boundaries for using AI in translation tasks. These initial codes were then compared and refined through an iterative process, allowing them to merge into broader thematic categories. By integrating these codes with those emerging from the interview narratives, the researchers were able to capture a deeper and more nuanced understanding of students' perceptions of AI-assisted translation, enhancing the trustworthiness of the findings. To strengthen the credibility of the findings, a peer-review process was conducted in which coding decisions and identified themes were discussed with a colleague experienced in qualitative translation studies.

Given the researchers' dual roles as course instructors, reflexivity was emphasized to minimize bias and ensure the authentic representation of participants' perspectives. Participation was voluntary and involvement had no influence on academic evaluation. A reflexive journal was maintained throughout the data collection and analysis stages to document assumptions, analytic decisions, and potential

influences on interpretation (Lingard & Klasen, 2025). Ethical approval was obtained from the department's research committee prior to data collection. All participants were informed of the study's purpose, procedures, confidentiality measures, and their right to withdraw at any time. Consent was obtained for recording the interviews, and all collected data were securely stored.

3. Results

The following section presents the findings from the interviews with twelve novice translators regarding their experiences and perceptions of AI-assisted translation tools. The results highlight patterns in participants' translation backgrounds, the AI tools they use, perceived benefits and concerns, their views on AI's role in learning, and how they believe AI should be integrated into translation practice. Insights from instructor guidance are also included to contextualize students' experiences.

3.1. Background of Novice Translators

The study involved twelve participants, all classified as novice translators, reflecting a range of prior exposure to translation. All participants were enrolled in their first formal translation course at the university level, while some had limited informal experience, such as translating manga or song lyrics (P3, P5, P7). Despite differences in prior exposure, all participants shared a common status as beginners in translation practice, with limited procedural knowledge and experience applying translation strategies in professional or academic contexts. This homogeneity of experience enabled the study to concentrate specifically on novice viewpoints toward AI-assisted translation, ensuring that the results captured the kinds of perceptions, assumptions, and concerns commonly found among learners in the early stages of developing translation competence. A summary of participant backgrounds is presented in Table 1 for clarity. Each participant is anonymized (P1–P12) to protect confidentiality.

Table 1. Participants' Background

Participants	Translation Background	Experience Level
P1	First time learning translation	Novice
P2	First translation class	Novice
P3	Manga translation informally	Novice
P4	Translation part of major	Novice
P5	University learning and lyrics	Novice
P6	1 semester learning	Novice
P7	Informal and formal	Novice
P8	Study program	Novice
P9	No formal background	Novice
P10	Learned in university	Novice
P11	College	Novice
P12	New to translation	Novice

This overview highlights that while participants' prior experiences vary, all can be considered novice translators, providing a consistent foundation for exploring perceptions, mental models, and attitudes toward AI-assisted translation tools.

3.2. AI Tools Used by Novice Translators

All twelve participants reported using AI-assisted translation tools during their coursework, though the specific tools and frequency of use varied. As can be seen in Table 2, the most commonly mentioned tools were Google Translate, ChatGPT, DeepL, and Gemini, with a few participants also using Microsoft Translator, Grammarly, or Papago for specific tasks.

Participants tended to select tools based on the task at hand. For instance, Google Translate and DeepL were frequently used for checking difficult words or comparing phrasing, while ChatGPT and Gemini were favored for grammar checking, sentence flow, and ensuring naturalness. Some participants reported using AI tools in combination, switching between them to verify outputs or to obtain alternative translations. For example, P2 stated, "I usually check my translation with ChatGPT first, then compare it with Google Translate to make sure it sounds natural."

The findings indicate that novice translators are already experimenting with multiple AI tools to support different aspects of their translation work. While some participants used AI mainly for mechanical checks, others explored more advanced applications, such as refining tone or generating alternative phrasing, reflecting emerging strategies even among beginners.

Table 2. Novice Translators' Use, Perceptions, and Instructor Guidance of AI Tools

Participants	AI Tools Used	Using AI in Translation	Benefits of AI	Concerns About AI	AI's Role in Learning	Recommended Role of AI	Instructor Stance
P1	Google Translate, Gemini, ChatGPT	Grammar checking after manual translation	Fast, efficient	Skills won't improve	Makes students passive	AI only as reference	Mixed
P2	ChatGPT, Gemini, Google Translate	Assistance & reference	Convenient, fast	Overdependence, ethical concerns	Faster practice	Assistant & reference	Allowed but cautious
P3	DeepL, Google Translate	For difficult words	Easier & faster	Forget meaning if overreliant	Double-edged	AI as assistant	Allowed
P4	DeepL, Google Translate, ChatGPT	For technical/urgent tasks	Saves time	Skill decline, data privacy	Better analysis time	Reference tool	Allowed w/ post-editing
P5	Google Translate, DeepL, ChatGPT	Compare with manual work	Alternative phrasing	Lose skill	Faster learning but lazy	Guidance tool	Allowed
P6	ChatGPT, Gemini, Papago	Check naturalness	Native-like phrasing	Mistranslation & culture issues	Faster learning	Checking tool	Allowed
P7	Google Translate, DeepL, ChatGPT	Check nuance & synonyms	Fast for long texts	Fluent but wrong outputs	Vocab gain but dependent	Draft improvement tool	Allowed, warned

Participants	AI Tools Used	Using AI in Translation	Benefits of AI	Concerns About AI	AI's Role in Learning	Recommended Role of AI	Instructor Stance
P8	ChatGPT, Google Translate, Microsoft Translator	Check vocabulary & grammar	Instant explanations	Emotional tone lost	Skip dictionaries	Support tool	Allowed w/ citation
P9	Google Translate, ChatGPT	Accuracy checking	Avoid basic mistakes	Lose personal style	Understand grammar but weak dictionary skill	Checking tool	Allowed
P10	DeepL, ChatGPT, Gemini	Check naturalness & formality	Consistent terminology	Cultural inaccuracies	Vocab gain but impatience	Proofreader /editor	Encouraged for revision
P11	Google Translate, Grammarly, ChatGPT	General meaning → rewrite	Reduces stress	Miss errors	More confident but dependent	Brainstorming tool	Critical use encouraged
P12	ChatGPT, Google Translate	Flow checking	Fast, reduces errors	Overreliance	Vocab gain but skip grammar	Suggestion tool	Discouraged for full translation

3.3. Benefits of AI in Translation

Participants reported using AI tools for a variety of tasks to support their translation work. Most commonly, AI was applied to grammar checking, vocabulary support, and improving the naturalness or flow of sentences after manual translation. Some participants also relied on AI to handle difficult or technical terms, draft initial translations, or explore alternative phrasing. These uses suggest that novice translators approached AI as a flexible tool to assist them at different stages of the translation process.

Many participants combined multiple AI tools depending on the task. For example, ChatGPT was often used for grammar, Google Translate for vocabulary, and DeepL for technical terms. P7 explained, "I check synonyms and nuance using DeepL or ChatGPT to make my translation sound better," while P12 noted, "When I'm stuck on technical terms, I draft a sentence in DeepL, then revise it manually." This combination approach shows that even novice translators were experimenting with different tools to achieve more accurate and fluent translations while still relying on their own judgment.

3.4. Concerns About AI Use in Translation

Despite recognizing the usefulness of AI tools, participants consistently expressed concerns about becoming overly dependent on them. Many worried that frequent reliance on AI would weaken their core translation skills, such as vocabulary retention, grammar awareness, and the ability to choose accurate equivalents independently. Several participants worried that long-term dependence would weaken vocabulary recall or make them "lazy" in problem-solving (P3, P5, P6, P12). A number of students expressed concern that AI tools might produce fluent but incorrect translations—errors that beginners may not be able to detect (P7, P11). This aligns with concern about "illusion of accuracy," especially in complex or culturally nuanced texts.

Some participants raised issues related to ethics and academic honesty, such as uncertainty about when AI use becomes inappropriate or unethical (P2, P7). Others highlighted concerns about data

privacy, especially when handling sensitive documents in AI systems (P4). Emotional concerns also emerged: fear of losing one's "personal style" as a translator (P9) and fear of becoming passive learners (P1). These findings show that students' unease goes beyond technical accuracy and involves deeper anxieties about identity, autonomy, and professionalism.

3.5. Perceived Role of AI in Learning

Participants viewed AI as beneficial for building vocabulary, observing sentence patterns, and receiving quick clarifications (P6, P7, P10, P12). Many said it improved their efficiency by allowing them to learn faster with less frustration (P2, P4, P5). Others said AI helped them focus more on analyzing meaning rather than spending excessive time on word-level translation (P4). These positive experiences indicate that AI supports cognitive and linguistic development, particularly in lowering barriers for novice learners.

However, many participants also acknowledged that AI can undermine deeper learning. Several noted that AI reduces the "struggle process" that typically strengthens translation skills (P1, P6, P12). Others pointed out that overuse makes them skip dictionaries or rely less on grammar knowledge (P6, P8, P12). A few even described AI as a "double-edged sword" (P3), helping learning on one side but weakening independence on the other. Overall, students saw AI as useful but potentially detrimental without self-regulation.

3.6. Recommended Role of AI in Translation Training

Most participants agreed that AI should serve as a supportive tool—an assistant, reference, or guide—rather than the main translator. They repeatedly emphasized that translation should still begin with manual work, with AI providing feedback afterward (P1, P5, P6, P8, P9). Several described AI as a "reference" (P1, P4), "assistant" (P2, P3), "checking tool" (P6, P9), or "proofreader/editor" (P10). This shared view underscores that novice translators value human judgment and see AI as an enhancer of quality rather than a replacement.

The role they recommend reflects caution: AI should help with structure, terminology, or naturalness, but students want to remain responsible for the final decision. Many insisted that AI must not replace critical thinking or manual translation because those processes are essential to building long-term expertise. Their recommendations show that while students accept AI as part of their workflow, they want its use to be bounded and intentional.

3.7. Instructor Stance on AI Use

Participants reported varied experiences regarding how instructors addressed AI in the classroom. Some described a mixed or inconsistent stance, where certain lecturers allow AI while others discourage it (P1). Many indicated that instructors generally allow AI as long as students do not rely on it fully and remain honest about their use (P2, P7, P8). Others said their lecturers explicitly require post-editing or revision when AI is used (P4, P10, P12). This indicates a growing tendency among instructors to frame AI not as prohibited technology but as a tool requiring critical engagement.

Across participants, the most common instructional message was to avoid overdependence. Several students reported receiving warnings about academic honesty, plagiarism, or the need to develop their own skills (P7, P11). Only a few mentioned instructors who discouraged AI for full translation tasks (P12). Overall, instructors seem to acknowledge that AI is now part of the learning ecosystem and encourage students to use it strategically rather than blindly.

4. Discussion

The discussion of this study centers on how novice translators engage with AI tools and perceive their role in translation learning. They are classified as novice translators as all of them are taking their

first formal translation class (Introduction to Translation) or have only informal experience. The homogeneity of their background provides a clear lens through which to interpret their attitudes: because all participants are early-stage learners, their heavy experimentation with AI, their enthusiasm, and their concerns reflect the realities of translation beginners who are still building foundational strategies. This aligns with arguments in translation pedagogy that early-stage learners are more vulnerable to over-reliance on machine or AI translation, possibly bypassing deeper strategy development or critical engagement (Tavares, 2023; Wang, 2023).

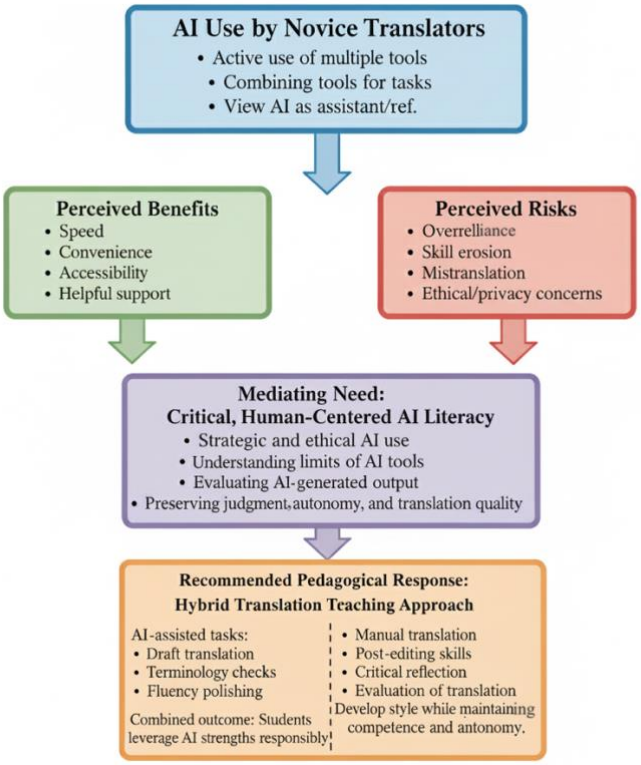

Figure 1. Conceptual Model of Novice Translators' Engagement with AI-Assisted Translation Tool

Figure 1 presents the conceptual model derived from the findings. The interview data show that novice learners do not rely on a single AI platform; instead, they actively combine tools such as Google Translate, DeepL, Gemini, and especially ChatGPT. This mixing of tools appears intentional. For example, P2 mentioned using ChatGPT first for a draft and then checking the phrasing against Google Translate, while P4 reported switching between tools depending on text difficulty or urgency. Rather than signaling blind dependence, this suggests an emerging awareness of each tool's capabilities, where students are learning what AI can and cannot do. This aligns with current observations in translation education that novice translators increasingly develop "AI–translator literacy" by engaging in comparison, post-editing, and trial-and-error as part of their workflow. This finding resonates with research on generative AI in translation education: in a recent qualitative study, most students reported using GenAI tools like ChatGPT not only for final output but across multiple stages of translation, from drafting to revision (Zhang et al, 2025). Similarly, research comparing different AI translation engines found that learners may prefer different tools depending on text type (e.g., for literary vs. technical texts), which supports a flexible, hybrid human–AI workflow (Rachmayanti et al, 2025).

Participants also highlighted clear benefits of AI use. Many described AI as speeding up the translation process, reducing stress, and helping them handle vocabulary, tone, or long texts that would otherwise overwhelm their current skill level. Several noted that AI enhanced their confidence,

especially when checking naturalness or ensuring consistency of terminology. consistent with broader findings that AI tools can lower barriers to translation for beginners and support their entry into translation tasks. For example, studies have found that AI translation tools facilitate access to meaning, expedite translation tasks, and support learners' confidence in early translation practice (Munibi, 2025). In particular, the fact that participants like P4 and P2 appreciated the time-saving aspect when translating technical or urgent texts suggests that AI may serve as a scaffolding tool: it helps manage workload while learners focus more on meaning, context, and revision, which has been observed in recent translation-education research.

However, the interviews also reveal significant concerns. Many participants worried that frequent use of AI might weaken their skills or hinder dictionary use. P3 admitted that they "forget meanings if depending too much on DeepL," and others feared losing their personal writing style or making unnoticeable mistakes because AI outputs sound fluent. Cultural inaccuracies, ethical concerns, and data privacy also emerged, particularly among students translating sensitive content. These anxieties reflect wider debates about AI adoption in education, where scholars warn that over-dependence can reduce deep processing, critical thinking, and long-term competence, risks especially relevant for inexperienced translators who lack the expertise to evaluate AI output effectively.

As noted in a systematic review of AI in education, overuse of large language models may raise issues of transparency, privacy, and ethicality, especially in professional or academic contexts (Yan et al, 2023). In translation, misuse of AI may compromise not only linguistic accuracy but also cultural sensitivity, and undermine the development of translator autonomy (Hizam et al., 2025). For novice translators, this can be especially concerning: they might accept AI suggestions uncritically, which could cement errors or shallow translation strategies, undermining long-term skill development.

Participants generally viewed AI as helpful but not as a replacement for human translation efforts. They emphasized that AI should play a supporting role, such as checking accuracy, generating alternative phrasings, or improving drafts, rather than producing a full translation for submission. Several explained that manual translation should come first, with AI used for revision, nuance checking, or post-editing. This perspective suggests a healthy awareness of the limits of AI and echoes the growing consensus that human-AI collaboration, not substitution, is the most pedagogically productive model. This reflects a cautious, but pragmatic, attitude toward human–AI collaboration. Learners value AI's benefits, but also emphasize the importance of human judgment and manual effort, especially for quality control and skill building. This attitude aligns with recent proposals in translation pedagogy calling for a human-centered approach to AI integration (Özmat & Akkoyunlu, 2024). Therefore, AI serves as an assistant, not a replacement, and where ethical, critical, and metacognitive skills remain central. This balance seems especially important in translation education today. While AI tools promise efficiency and accessibility, their educational value depends on learners' ability to use them critically, reflectively, and strategically, not merely as a shortcut.

Across interviews, students described their instructors as mostly allowing AI use but with warnings or restrictions. Some lecturers require post-editing, others emphasize citation, and a few encourage AI only for comparison or learning purposes. This mirrors findings in recent empirical studies: while many institutions now accept AI tools in translation courses, they often emphasize ethical, critical, and human-centered use rather than unrestricted application (Özmat & Akkoyunlu, 2024). This mixed stance appears to influence student behavior: rather than relying unquestioningly on AI, students tend to use it cautiously, balancing its efficiency with the need to develop foundational translation skills. The instructor's position, therefore, plays a substantial role in shaping responsible AI engagement. Instructors must guide students in developing not only technical competence with AI tools but also translation judgment, ethical awareness, and skill autonomy.

5. Conclusions

The present study shows that novice translators, even with limited experience, actively use a variety of AI-assisted translation tools. They also often combine them to support translation tasks. They appreciate the speed, convenience, and accessibility offered by AI, yet they also express valid concerns about overreliance, skill erosion, mistranslation, and ethical or privacy issues. Importantly, they envision AI not as a replacement, but as an assistant or reference. In addition, many maintain the view that human judgment and manual translation remain essential.

These findings echo broader research in translation education and generative-AI adoption, underscoring the need for critical, human-centered integration of AI in translation curricula. For educators and program designers, the challenge is to foster AI literacy, which is enabling learners to use AI strategically and ethically while preserving core translation competencies and autonomy.

These findings suggest that while AI tools provide novice translators with clear advantages, such as speed, convenience, and helpful support, they also pose considerable risks when used without thoughtful monitoring or critical evaluation. Thus, translation curricula should integrate AI literacy as a core component: teaching what AI tools can and cannot do, how to evaluate AI-generated output, when to rely on one's own judgment, and how to maintain translation quality and personal style. Therefore, translation programs might benefit from a hybrid pedagogy: combining AI-assisted tasks (e.g., draft translation, terminology checks, fluency polishing) with manual translation, post-editing, critical reflection, and evaluation exercises. Such an approach helps students leverage AI's strengths while safeguarding the human, interpretive, and ethical dimensions of translation.

References

Baskara, F. R. (2025). Conceptualizing digital literacy for the AI era: A framework for preparing students in an AI-driven world. *Data and Metadata, 4*, 530. https://doi.org/10.56294/dm2025530

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The Sage handbook of qualitative research*. Sage.

Hizam, I., Aziz, Y. A., & Hakiki, A. S. (2025). Integrasi Artificial Inteligence (AI) sebagai alat bantu dalam penerjemahan Bahasa Arab–Indonesia. *Shaut al-Arabiyah: Jurnal Arabiyah, 13*(1), 1–15. https://doi.org/10.24252/saa.v13i1.55357

Lingard, L., & Klasen, J. (2025). Qualitative data, cross-language research and AI translation: Three icebergs. *Medical Education, 59*(6), 566–568. https://doi.org/10.1111/medu.15671

Munibi, A. Z. (2025). Leveraging AI translation for enhancing information literacy in language education. In *Proceedings of ANCOLT International Conference on Language Teaching*.

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods, 16*, 1–13.

Omar, L. I., & Salih, A. A. (2024). Systematic review of English/Arabic machine translation postediting: Implications for AI application in translation research and pedagogy. *Informatics, 11*(2), 23. https://doi.org/10.3390/informatics11020023

Özmat, D., & Akkoyunlu, B. (2024). Artificial Intelligence-assisted translation in education: Academic perspectives and student approaches. *Participatory Educational Research, 11*(6), 151–167.

Rachmayanti, I., Alatas, M. A., Ma'arif, A. S., Albaburrahim, & Romadhon, S. (2025). Inovasi penerjemahan digital berbasis kecerdasan buatan: Studi komparatif antara ChatGPT, Google Translate, dan penerjemah manusia dalam teks sastra dan ilmiah. *Social, Humanities, and Educational Studies (SHES), 8*(3), 885–895.

Tavares, C., Tallone, L., Oliveira, L., & Ribeiro, S. (2023). The challenges of teaching and assessing technical translation in an era of neural machine translation. *Education Sciences, 13*(6), 541. https://doi.org/10.3390/educsci13060541

Wang, Y. (2023). Artificial intelligence technologies in college English translation teaching. *Journal of Psycholinguistic Research, 39*(4), 1525–1544. https://doi.org/10.1007/s10936-023-09960-5

Xu, S., Su, Y., & Liu, K. (2024). Integrating AI for enhanced feedback in translation revision: A mixed-methods investigation of student engagement. *Education and Information Technologies*. https://doi.org/10.1007/s10639-025-13457-0

Yan, L., Sha, L., Zhao, L., Li, Y., Martinez-Maldonado, R., Chen, G., Li, X., Jin, Y., & Gašević, D. (2023). Practical and ethical challenges of large language models in education: A systematic scoping review. *British Journal of Educational Technology, 55*(1), 90–112.

Yi, Y. (2021). Establishing the concept of AI literacy. *JAHR, 12*(2), 353–368. https://doi.org/10.21860/j.12.2.8

Zhang, W., Li, A. W., & Wu, C. (2025). University students' perceptions of using generative AI in translation practices. *Instructional Science, 53*, 633–655. https://doi.org/10.1007/s11251-025-09705-y