

AI and Human Interaction in Translation Education: Perceptions of Indonesian EFL Lecturers

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Abstract

This study investigates Indonesian lecturers' perceptions of Artificial Intelligence (AI) in translation education, focusing on how technology reshapes pedagogy, student engagement, and institutional practices. Employing a qualitative phenomenological design, data were collected through semi-structured interviews with lecturers who actively integrated AI tools into translation teaching. Thematic analysis identified five major findings: perceived benefits of AI for efficiency and accessibility, pedagogical shifts and curriculum integration, challenges of student dependence and diminished critical thinking, ethical and responsible use of AI tools, and AI as a catalyst for institutional and administrative efficiency. While lecturers acknowledged AI's transformative potential in facilitating translation tasks, they also highlighted risks of overreliance, ethical dilemmas, and uneven access. The study concludes that integration requires balancing technological affordances with humanistic values, fostering critical AI literacy, and embedding ethical considerations in pedagogy. These findings contribute to ongoing debates on AI-enhanced translation pedagogy in global higher education institutions.

Keywords: Artificial Intelligence, translation education, lecturers' perceptions, pedagogy.

INTRODUCTION

The rapid integration of Artificial Intelligence (AI) into higher education has brought transformative changes to teaching and learning practices ((Ouyang & Jiao, 2021), particularly in the field of translation studies (Wang, 2023; Ramadilla et al., 2025). Translation education, which has traditionally emphasized linguistic competence, cultural awareness, and critical thinking, is now increasingly shaped by AI-driven tools such as machine translation, neural networks, and computer-assisted translation systems (Ling-hui, 2022; Rapa, Saja, & Azmi, 2024). These technologies offer unprecedented opportunities for efficiency, accessibility, and innovation (Naveen & Trojovský, 2024). However, they also raise fundamental questions about the role of human agency, creativity, and professional identity in the evolving landscape of translation.

In Indonesia, where translation plays a vital role in bridging linguistic and cultural boundaries, the adoption of AI in higher education remains a contested yet inevitable development. While AI can enhance productivity and provide valuable support in the classroom, its use also generates concerns among lecturers regarding accuracy, overreliance, and the erosion of students' critical thinking skills (Hasanein & Sobaih, 2023; Melisa et al., 2025). Lecturers, as key stakeholders in shaping translation pedagogy, often navigate a dual responsibility: embracing technological advances while safeguarding the humanistic dimensions of learning. Their perceptions therefore provide crucial insights into how AI and human interaction can be balanced in educational settings.

This study seeks to explore Indonesian lecturers' perceptions of AI integration in translation education, focusing on how they negotiate opportunities and challenges in practice. By examining these perspectives, the research contributes to global debates on the future of translation pedagogy in the AI era, while highlighting the specific dynamics within the Indonesian context.

AI as a Pedagogical Support in Translation Education

The integration of Artificial Intelligence (AI) into translation education has transformed pedagogical practices by shifting the focus from traditional text-based instruction to technology-mediated learning (Alkhofi, 2025). AI-driven tools, such as neural machine translation (NMT) systems and large language models (LLMs), are increasingly used not merely as substitutes for human effort but as pedagogical supports that enhance teaching and learning processes. Studies indicate that AI can facilitate students' acquisition of translation competence through immediate feedback, exposure to multiple translation options, and opportunities for comparative analysis (Li & Tekwa, 2025; Budi et al., 2024; Budiharjo, 2024; Wang, 2023). In classroom contexts, AI enables instructors to design interactive activities such as post-editing tasks, error detection, and critical evaluation of machine-generated output, which foster higher-order thinking skills rather than mechanical translation practices.

Furthermore, AI provides accessibility and efficiency by allowing students to engage with authentic texts and simulate professional translation environments, thereby bridging the gap between academic training and industry expectations (Nguyen et al., 2025). Nevertheless, scholars caution that AI should be positioned as a supportive tool rather than a replacement for human agency, as overreliance may diminish students' critical judgment and creativity (Szmyd

& Mitera, 2024; Yamada, 2023).). Thus, effective pedagogy requires a balanced integration of AI, where technology complements human interaction in cultivating translation expertise.

The Rise of AI in Translation Practice and Education

The rapid advancement of Artificial Intelligence (AI) has reshaped translation practice and, consequently, translation education. From the early days of rule-based and statistical machine translation to the current era of neural machine translation (NMT) and large language models (LLMs), the field has experienced a paradigm shift in both efficiency and accuracy (Fan, Gong & Gong, 2024). AI tools such as Google Translate, DeepL, and ChatGPT are no longer viewed as auxiliary aids but as essential resources that influence how translation tasks design, pedagogical approaches, and learner perceptions (Sidiq & Syafryadin, 2023). In educational contexts, these technologies expose students to authentic industry practices, allowing them to experience professional workflows that rely heavily on AI integration. They also foster student autonomy by providing immediate feedback and diverse linguistic options. However, scholars emphasize that the growing reliance on AI necessitates a reconceptualization of translation competence to include technological literacy, critical evaluation, and post-editing skills (Pym, 2013). As AI becomes increasingly embedded in the translation profession, translation education faces the dual challenge of preparing students to use these tools effectively while ensuring that fundamental cognitive, linguistic, and cultural competencies are not undermined. Thus, the rise of AI demands a balanced pedagogical approach that integrates technology without compromising human expertise (Syaripudin et al, 2025).

Pedagogical Transformations in Translation Education

The integration of AI has accelerated pedagogical changes in translation education, moving beyond conventional teacher-centered methods toward technology-enhanced, learner-centered approaches (Ouyang & Jiao, 2021). AI-enabled tools provide novel opportunities for experiential learning, where students engage in tasks such as post-editing, error detection, and comparative analysis of human versus machine output. These activities not only improve technical competence but also promote critical thinking and problem-solving. Pedagogical frameworks increasingly adopt blended and project-based learning, where AI supports collaboration, self-directed study, and authentic simulations of industry practices. For example, students can practice real-world translation scenarios by utilizing AI systems to generate drafts and then critically refine them, reflecting workflows in professional environments. Instructors, in turn, can leverage AI to design adaptive learning activities, tailor feedback, and monitor student progress efficiently (Ouyang & Jiao, 2021). However, scholars caution that such transformations must avoid overdependence on AI, which risks reducing translation to mechanical post-editing rather than cultivating creativity and intercultural awareness. Effective pedagogy thus requires striking a balance: integrating AI as a pedagogical partner while preserving the human elements of judgment, ethics, and cultural sensitivity that define professional translation practice (Jiménez-Crespo, 2025).

Educators' Perceptions and Attitudes Toward AI Integration

Educators' perceptions play a decisive role in shaping how AI is integrated into translation curricula. The perceptions theory consisted of understanding, experience, and attitudes (Robbins,

& Judge, 2013). Research suggests that lecturers demonstrate a spectrum of attitudes ranging from enthusiasm to resistance. On one hand, some educators perceive AI as a valuable pedagogical tool that enhances efficiency, provides immediate feedback, and familiarizes students with professional realities (Syaripudin et al, 2025). On the other hand, skepticism persists due to concerns about diminishing students' critical thinking skills, fostering dependency, or undermining the role of the human translator. Factors such as age, digital literacy, disciplinary background, and exposure to industry practices often influence these attitudes. Younger or digitally literate lecturers may be more open to experimentation with AI, while others may approach integration cautiously, emphasizing traditional skills such as text analysis and cultural mediation. Importantly, lecturers' attitudes directly shape classroom dynamics, influencing whether AI is framed as a supportive tool, a disruptive force, or a skillset to be mastered. Understanding these perceptions is vital because they determine how translation education evolves to prepare students for AI-mediated professional environments. The challenge lies in cultivating an informed perspective among educators—one that acknowledges AI's potential while safeguarding pedagogical goals.

Ethical, Critical, and Cognitive Dimensions of AI Use

The rise of AI in translation education raises pressing ethical, critical, and cognitive considerations (Kimera, Kim & Choi, 2024). Ethically, questions emerge regarding authorship, accountability, and intellectual property when machine-generated texts are integrated into academic or professional work (Nadim & Di Fuccio, 2025). Educators express concern that overreliance on AI may encourage plagiarism or erode students' sense of responsibility for translation choices. Critically, the increasing automation of translation requires the cultivation of "critical AI literacy," where students and educators alike learn to question the limitations, biases, and cultural blind spots of AI-generated output (Wang & Liu, 2024; Shahmerdanova, 2025). From a cognitive perspective, scholars argue that while AI can accelerate tasks and provide multiple translation options, it risks diminishing the development of problem-solving, creativity, and deep linguistic analysis if not used judiciously. Post-editing activities and comparative analysis tasks have been suggested as pedagogical strategies to ensure that cognitive engagement remains central (Leon et al, 2025; Nguyen, 2025). Ultimately, the integration of AI must be guided by ethical frameworks and critical pedagogy to ensure that technological efficiency does not come at the cost of intellectual rigor or professional responsibility.

The Indonesian Context in Translation Education

Indonesia, translation education reflects a unique intersection of local challenges and global technological trends. Many universities face resource limitations, such as insufficient access to advanced AI tools and training, which may hinder widespread adoption. Moreover, Indonesia's linguistic diversity spanning Bahasa Indonesia, English, and hundreds of local languages—poses distinct challenges for AI systems that are typically optimized for dominant global languages. Despite these constraints, AI technologies are gradually being integrated into classrooms, offering opportunities for students to engage with authentic translation tasks and prepare for the increasingly digitalized professional landscape. Indonesian lecturers' perceptions are crucial in this process, as their openness or resistance to AI shapes pedagogical outcomes. Comparative studies suggest that while lecturers recognize AI's efficiency and accessibility, concerns about

overreliance and ethical implications remain pronounced in the Indonesian context. Furthermore, translation education in Indonesia must balance global industry demands with local linguistic and cultural realities, ensuring that students not only master AI-assisted workflows but also maintain sensitivity to cultural nuances. This dual challenge underscores the importance of contextualizing AI integration in ways that address both global standards and local educational needs.

METHOD

Research Design

This study employed a qualitative research design using a phenomenological approach to explore lecturers' lived experiences and perceptions of AI tool integration in translation teaching (Creswell & Poth, 2018). Data were collected through semi-structured interviews with English education lecturers from an Indonesian state university who had utilized AI-based tools in translation coursework. Participants were selected using purposive sampling to ensure relevance and depth of insight (Palinkas et al., 2015). The interviews were transcribed, coded, and thematically analyzed to identify emerging patterns related to pedagogical shifts, tool functionality, and cognitive engagement (Braun & Clarke, 2006). Triangulation and member-checking techniques were applied to enhance the study's credibility and trustworthiness. This design enabled the researcher to gain rich, contextually grounded understandings of how AI transforms translation pedagogy in higher education within the Indonesian context.

Participants of the Study

This qualitative study involved two lecturers in English Education Study Program at one of the Indonesian higher education institutions. Participants were purposefully selected based on their active engagement in translation-related courses and demonstrated experience using AI tools in their academic experiences, particularly in translation practice. The selection aimed to capture diverse perspectives across various academic levels, technology access, and usage frequency. They were interviewed individually using semi-structured interview protocols, enabling them to reflect on their perceptions, experiences, and challenges when integrating AI tools into translation teaching.

Data were collected through semi-structured interviews that encouraged participants to share their perceptions, understanding, experiences, and attitudes related to AI integration in translation learning (Robbins & Judge, 2013). Ethical research standards were strictly observed, including informed consent, confidentiality assurance, and the use of pseudonyms. Their responses ranged from enthusiastic adoption to critical, reflective engagement highlighting diverse approaches to navigating AI in translation pedagogy.

Procedures of Collecting Data

This qualitative study employed a semi-structured interview to explore lecturers' perceptions and experiences regarding the integration of AI tools in translation learning within Indonesian higher education. The data collection process was carefully designed to ensure depth, reliability, and contextual relevance. The research involved two participants, selected through purposive sampling to ensure that all individuals had experience using AI in translation-related coursework.

Interviews were conducted over a period of six weeks in March-April 2025. Considering the geographical spread and participants' schedules, interviews were conducted either face-to-face, or through WhatsApp voice calls. Each interview lasted between 30 to 50 minutes, depending on the depth of the participant's responses. The interviews were conducted in Bahasa Indonesia to allow participants to express their thoughts more naturally and comprehensively.

The interview guide consisted of open-ended questions focusing on students' understanding of AI, frequency and purpose of AI tool usage, perceived benefits and limitations, and the perceived impact of AI on their translation competence. Follow-up and probing questions were used to clarify points and encourage elaboration. All interviews were audio-recorded with participants' consent and later transcribed verbatim for analysis.

To ensure the validity of the data, member checking was employed by returning key interpretations to the participants for confirmation. Additionally, field notes were taken during and immediately after the interviews to capture non-verbal cues and contextual factors that could enrich the data. The transcripts were then thematically coded, focusing on recurring themes related to pedagogical changes, learner autonomy, technological affordances, and cognitive engagement.

Data Analysis

The analysis followed six-phase framework: familiarization with the data, initial coding, searching for themes, reviewing themes, defining and naming themes, and producing the report (Braun & Clarke, 2006). All interviews were transcribed verbatim and read multiple times to ensure deep immersion in the data. The initial phase of coding was carried out manually through an inductive method, enabling thematic categories to organically arise from the participants' accounts. These codes were subsequently consolidated into overarching themes that captured consistent patterns, conceptual insights, and perceptions concerning the integration of AI in translation education. To strengthen the study's credibility, the processes of peer debriefing and investigator triangulation were employed, with two independent scholars critically examining the coding framework and thematic construction.

FINDINGS

To provide a clearer overview of the results, the key themes identified from the lecturers' interviews are summarized in Table 1. These themes capture the complex ways in which Artificial Intelligence (AI) is shaping translation education in Indonesian higher education institution. The analysis highlights both opportunities and challenges, ranging from efficiency gains and curriculum integration to concerns about student dependence, ethical responsibility, and institutional transformation. Presenting the findings in tabular form enables a concise visualization of the lecturers' perceptions, making it easier to connect recurring patterns across the data. Each theme reflects not only the pedagogical implications of AI but also its broader influence on academic practices and educational management within the university context.

Tabel 1. Themes and Key Findings from Lecturers' Perceptions

Theme	Key Findings
Perceived Benefits of AI in Translation Education	Lecturers perceived AI as highly beneficial for creating efficiency, accessibility, and productivity. AI tools support both teaching and learning by providing instant lexical choices, enabling quicker analysis, and reducing lecturers' workload in demonstrations and feedback.
Pedagogical Shifts and Curriculum Integration	AI has triggered a shift from teacher-centered to participatory learning. Lecturers integrate AI into the syllabus (RPS), combining theoretical instruction with AI-based practice. Activities include comparing outputs from different tools, post-editing, and group critiques, fostering critical reflection and collaborative learning.
Challenges of Student Dependence and Critical Thinking	Overreliance on AI was noted, with students often submitting translations without verification. This weakens their analytical engagement. Lecturers encourage strategies such as comparative evaluations, error analysis, and justification exercises to promote critical awareness and deeper cognitive engagement.
Ethical and Responsible Use of AI Tools	Respondents stressed the importance of ethical literacy in AI use. Concerns include plagiarism, uncritical adoption, and neglect of contextual appropriateness. Lecturers emphasize responsible use through supervision, explicit instructions, and discussions on ethics, integrity, and accountability.

Lecturers Perceived Benefits of AI in Translation Education

The findings reveal that lecturers perceive Artificial Intelligence (AI) as a highly beneficial tool in translation education, primarily due to its efficiency, accessibility, and ability to enhance both teaching and learning processes. According to the respondents, AI supports the teaching of translation by reducing the time and effort traditionally required in searching for appropriate lexical choices and contextual meanings. Compared with conventional methods such as relying on printed dictionaries, AI-enabled tools like Google Translate, DeepL, and ChatGPT provide students with instant results, which allow them to focus more on analyzing and comparing the quality of outputs rather than merely engaging in mechanical word searches.

Lecturers also emphasized that AI contributes to their own teaching productivity. The integration of AI in the classroom enables instructors to provide immediate feedback, demonstrate translation alternatives in real time, and guide students in critically evaluating different outputs. Furthermore, AI eases the instructional workload by streamlining course delivery, such as through direct demonstrations connected to projectors and interactive classroom practices. This not only creates a more dynamic learning environment but also supports collaborative analysis among students.

In addition to pedagogical benefits, respondents highlighted the broader institutional advantages of AI. The automation of administrative tasks, such as attendance, grading, and data management, allows lecturers to redirect their focus toward more substantive aspects of instruction and student engagement. Such institutional support underscores the dual function of AI: it is not only a technological aid in translation practice but also an enabler of more efficient higher education management.

Overall, the perceived benefits of AI demonstrate its potential to transform translation education by balancing efficiency with opportunities for deeper cognitive engagement. Lecturers

recognize AI as a necessary and unavoidable element of contemporary pedagogy, one that enriches both instructional practice and administrative efficiency.

Pedagogical Shifts and Curriculum Integration

The findings indicate that the integration of AI into translation education has led to noticeable pedagogical shifts, compelling lecturers to adapt their instructional strategies to balance conventional approaches with technology-driven practices. Respondents noted that while foundational theories of translation remain essential, AI has altered the way these theories are operationalized in classroom activities. Lecturers commonly begin with theoretical instruction on literal and meaning-based translation before transitioning to the application of AI tools, thereby ensuring that students approach technology use with a solid conceptual grounding. This sequencing reflects a deliberate pedagogical design that prioritizes critical engagement rather than passive reliance on automated outputs.

Curriculum-wise, AI is no longer treated as an optional supplement but has been formally integrated into course syllabi and lesson plans. Respondents reported including AI as a topic in the RPS (syllabus) to align with current technological developments and student expectations. Classroom practices now often involve demonstrations of AI-based translation tools, interactive exercises comparing outputs from multiple systems, and group discussions that foster critical reflection on linguistic choices. Such integration also reflects an effort to democratize the classroom by creating spaces where students actively critique and evaluate AI-generated translations, thus cultivating analytical and collaborative learning.

Overall, the data reveal that AI's presence is reshaping pedagogical orientations: from teacher-centered instruction toward more participatory, technology-enhanced learning environments. This curricular adaptation not only acknowledges the inevitability of AI in translation practice but also positions lecturers as facilitators who guide students in developing both technological literacy and critical translation competence.

Challenges of Student Dependence and Critical Thinking

The findings highlight that while AI offers significant pedagogical benefits, it simultaneously introduces challenges related to student dependence and the development of critical thinking skills. Lecturers observed that many students tend to rely heavily on AI-generated translations, often accepting results at face value without conducting adequate verification or analysis. This overreliance risks diminishing students' engagement with fundamental translation processes, such as consulting dictionaries or exploring lexical alternatives, which traditionally foster deeper linguistic competence.

Respondents expressed concern that such dependency could hinder the cultivation of critical analytical skills. Students frequently submit translations produced by AI without interrogating their accuracy or contextual appropriateness. As a countermeasure, lecturers adopt strategies to encourage critical reflection, such as requiring students to compare outputs from multiple AI tools, analyze discrepancies, and justify their evaluative judgments. Through these practices, instructors aim to transform AI from a shortcut into a resource for critical inquiry and analytical skill-building.

Another challenge pertains to balancing efficiency with intellectual effort. While AI accelerates translation tasks, lecturers noted that students sometimes neglect theoretical

frameworks and rely excessively on automated solutions. This tendency can weaken their capacity to engage with translation as a cognitive and interpretive process. Consequently, lecturers emphasize scaffolding, combining theory-based instruction with AI-based practice, to mitigate the risks of shallow engagement.

In summary, the challenge lies not in the presence of AI itself but in ensuring its use promotes active learning. Effective guidance and structured classroom interventions are deemed essential to foster critical awareness and reduce unreflective dependence on technology.

Ethical and Responsible Use of AI Tools

The findings reveal that lecturers perceive the ethical use of AI in translation education as both a necessity and a challenge. Respondents emphasized that while AI facilitates learning efficiency, it also opens the possibility of misuse, particularly when students adopt uncritical or unethical practices such as copying outputs directly without further analysis. Such tendencies risk undermining the development of translation competence and academic integrity.

Lecturers expressed concern that students often fail to evaluate the validity, accuracy, and contextual appropriateness of AI-generated translations. This issue underscores the need for clear guidance on responsible engagement with technology. To address these risks, instructors highlighted their role in supervising, mentoring, and setting boundaries for AI use in the classroom. Furthermore, respondents acknowledged broader ethical issues, such as potential biases embedded in AI systems and concerns regarding data privacy. While these were not the primary focus of their classroom practice, they recognized the importance of raising students' awareness about such dimensions to prepare them for professional translation contexts where ethical decision-making is crucial.

Overall, the findings suggest that responsible use of AI requires active mediation by educators. AI is not rejected but framed as a tool that demands ethical literacy. Through structured supervision and the promotion of reflective practices, lecturers attempt to balance the efficiency of AI with the cultivation of integrity, critical evaluation, and professional responsibility.

DISCUSSIONS

The integration of Artificial Intelligence (AI) into translation education represents a profound pedagogical transformation that intersects technological affordances with humanistic concerns. The findings of this study, derived from Indonesian lecturers' perspectives, provide significant insights into how AI is reshaping translation pedagogy. Five interrelated themes emerged: perceived benefits of AI in translation education, pedagogical shifts and curriculum integration, challenges of student dependence and critical thinking, ethical and responsible use of AI tools, and AI as a catalyst for institutional and administrative efficiency. This discussion situates these themes within the broader literature, critically reflecting on their implications for translation pedagogy, lecturers' identity, and future educational practices in the Indonesian and global contexts.

Perceived Benefits of AI in Translation Education

One of the strongest and most consistent findings is that lecturers perceive AI as a highly beneficial tool in translation education. Respondents highlighted AI's ability to enhance

efficiency by reducing the time and effort traditionally invested in searching for lexical equivalents and contextual meanings. Tools such as Google Translate, DeepL, and ChatGPT provide immediate outputs, which enable students to focus on higher-order analytical tasks rather than on mechanical dictionary consultation (Zakarneh et al, 2025).

This benefit aligns with Garcia and Pena (2011), that observations that AI systems provide scaffolding, allowing learners to work with complex texts more efficiently. In the Indonesian context, where resource constraints can hinder access to comprehensive printed materials, AI functions as an equalizer, offering accessible linguistic databases at the click of a button. For lecturers, AI has also reduced the burden of repetitive classroom demonstrations. By integrating AI-based tools into instruction, they can provide instant examples, foster collaborative evaluations, and design interactive sessions that keep students actively engaged.

Institutionally, AI has been recognized as an enabler of efficiency beyond the classroom. The automation of administrative processes such as attendance and grading illustrate what (Wang & Liu, 2024; Shahmerdanova, 2025) calls “the double utility of AI” serving both pedagogical and managerial purposes. This duality not only increases lecturers’ productivity but also frees cognitive and temporal resources for more meaningful pedagogical engagement. In this sense, AI is not simply a teaching aid but a structural support that strengthens the higher education ecosystem.

Pedagogical Shifts and Curriculum Integration

The integration of AI is not merely an addition to existing pedagogies but a catalyst for curricular transformation (Syaripudin et al, 2025). The findings reveal a conscious shift from teacher-centered approaches toward participatory, technology-enhanced environments (Ouyang & Jiao, 2021). Lecturers begin with theoretical grounding teaching literal versus meaning-based translation strategies before encouraging students to apply these frameworks through AI-mediated practices. This sequencing resonates with (Ayvazyan, Hao, & Pym, 2024; Ouyang & Jiao, 2021) who emphasize the importance of maintaining theoretical rigor alongside technological adoption.

Moreover, AI has moved from being a supplementary tool to a formally recognized component of the curriculum. Respondents reported explicitly embedding AI into the RPS (syllabus), thereby aligning academic practices with contemporary industry expectations. Such integration reflects Pym’s (2013) argument that translation competence in the digital age must include technological literacy and post-editing skills. Classroom activities such as group comparisons of AI outputs, interactive post-editing, and collaborative error analysis represent efforts to cultivate critical reflection and collaborative learning.

This shift aligns with concept of experiential learning, in which students engage directly with authentic, technology-mediated tasks that mirror professional workflows. In practice, AI enables lecturers to move beyond traditional lecturing and into facilitative roles, guiding students toward independent yet critically reflective use of translation technologies (He, 2025; Ayvazyan, Hao, & Pym, 2024). This evolution suggests that Indonesian translation pedagogy is beginning to align with global trends while retaining local sensitivity to student readiness and resource availability (Budiharjo, 2024).

Challenges of Student Dependence and Critical Thinking

Despite these benefits, the findings underscore a significant tension: the risk of student overreliance on AI at the expense of critical thinking and linguistic depth (Avsheniuk et al, 2025; Ouyang & Jiao, 2021). Lecturers observed that many students tend to accept AI outputs uncritically, bypassing essential cognitive steps such as cross-checking, contextual evaluation, and reflection. This concern parallels argument that overreliance on automation risks eroding professional competencies, particularly in areas requiring cultural mediation and nuanced interpretation (Avsheniuk et al, 2025).

Respondents described instances where students submitted AI-generated work without adequate verification, a practice that undermines the educational purpose of translation training. To mitigate this, lecturers implemented strategies such as comparative output analysis, justification exercises, and multi-tool evaluations. These approaches resonate with (Ouyang & Jiao, 2021) notion of “AI literacy,” where learners are trained not merely to use AI but to interrogate, evaluate, and critique its outputs.

The challenge, therefore, is not the presence of AI but the pedagogical scaffolding that accompanies its use. The data suggest that without structured guidance, students may prioritize efficiency over intellectual effort, resulting in superficial engagement. By contrast, when educators deliberately frame AI as a resource for inquiry rather than as a shortcut, students develop deeper metacognitive skills (Melisa et al., 2025). This highlights the importance of intentional instructional design, where AI serves as a stimulus for critical awareness rather than as a replacement for cognitive effort.

Ethical and Responsible Use of AI Tools

Another key theme concerns the ethical and responsible use of AI in translation education. Lecturers expressed concern that students frequently misuse AI by copying outputs wholesale, raising questions of academic integrity and responsibility (Lund et al. 2025). Moreover, Pudasaini et al. (2024) have similarly argued that AI poses new ethical challenges, including issues of authorship, plagiarism, and intellectual property (AlSamhori & Alnaimat, 2024).

Respondents emphasized their role in fostering ethical literacy, underscoring the need for supervision, explicit instructions, and classroom discussions on responsible engagement. Such practices include encouraging students to cross-check AI outputs, acknowledge technological assistance, and avoid overreliance. These interventions mirror (Ouyang & Jiao, 2021) framework of “critical AI literacy,” where ethical reflection is foregrounded alongside technical competence. Lecturers also noted the broader ethical dimensions of AI, such as biases embedded in machine translation systems and concerns about data privacy (Lund et al. 2025). Although these were not central in classroom practice, their acknowledgment indicates growing awareness of the systemic implications of AI. As AI tools increasingly permeate professional translation contexts, ethical decision-making will become a non-negotiable component of translation competence (Gabriel et al, 2024; Khan et al, 2024).

The implications are particularly significant in Indonesia, where large student cohorts and resource constraints often overburden lecturers. By alleviating administrative pressures, AI enables instructors to focus on mentorship and academic engagement tasks that align more closely with the humanistic mission of education. Thus, AI is not only a pedagogical asset but also an infrastructural solution that contributes to systemic resilience in higher education.

Synthesis and Broader Implications

Taken together, these themes reflect a complex negotiation between technological opportunities and humanistic responsibilities. AI is widely acknowledged as beneficial for efficiency, accessibility, and innovation (Ouyang & Jiao, 2021; Lund et al. 2025), yet its uncritical adoption poses risks to academic integrity, critical thinking, and equity. Indonesian lecturers demonstrate a nuanced approach: they embrace AI as an inevitable pedagogical resource but simultaneously assert their role as facilitators, mediators, and ethical guides.

This dual stance echoes the global discourse on “augmented translation literacy, where the goal is not to resist AI but to integrate it responsibly into educational ecosystems. The Indonesian case provides unique insights: in contexts where infrastructure and access remain uneven, the challenge is not only pedagogical but also socio-economic. Ensuring equitable access to AI tools is as vital as cultivating critical AI literacy.

For translation pedagogy, the findings highlight the need for balanced curricula that integrate theory, practice, and technology (Ouyang & Jiao, 2021). Lecturers must navigate between efficiency and depth, automation and reflection, accessibility and integrity. The future of translation education lies in hybrid models that position AI as both a scaffold and a stimulus for deeper human engagement.

CONCLUSIONS

This study contributes to the growing body of scholarship on AI in translation education by foregrounding Indonesian lecturers’ perceptions. The findings reveal both optimism and caution: AI is perceived as an indispensable tool that enhances pedagogy and institutional efficiency, yet it also introduces challenges of dependence, ethics, and equity. The role of lecturers remains central not as mere transmitters of knowledge, but as facilitators who mediate between human cognition and machine intelligence.

Ultimately, the discussion underscores that the value of AI in education lies not in its ability to replace human expertise but in its capacity to augment it. By fostering critical awareness, ethical responsibility, and reflective practice, lecturers can ensure that AI integration strengthens rather than weakens the human dimensions of translation education. For the Indonesian context and beyond, the path forward requires sustained dialogue, institutional support, and pedagogical innovation to fully realize the transformative potential of AI in higher education.

ACKNOWLEDGMENTS

The authors would like to express their profound gratitude to Lembaga Pengelola Dana Pendidikan (LPDP) Indonesia for their support in sponsoring my studies, and providing funding for this publication.

REFERENCES

- Abduh, A., Sakkir, G., Rosmaladewi, R., Andrew, M., & Yasdin, Y. (2022). Teachers' Perceptions of English Teaching Strategies in the Current Curriculum Change. *International Journal of Language Education*, 4(6), 437-444.
- Alkhofi, A. (2025). Man vs. Machine: Can AI Outperform Student Translations?. *Frontiers in Artificial Intelligence*, 88, 1624754.
- AlSamhori, A. F., & Alnaimat, F. (2024). Artificial intelligence in writing and research: ethical implications and best practices. *Central Asian Journal of Medical Hypotheses and Ethics*, 5(4), 259-268.
- Avsheniuk, N., Seminikhyna, N., Ruban, L., & Sviatiuk, Y. (2025). Exploring Overreliance on AI Tools in English for Specific Purposes Courses: Challenges and Implications for Learning and Academic Integrity. *Arab World English Journal (AWEJ) Special Issue on Artificial Intelligence 2025* Pp.3-20 [DOI: https://dx.doi.org/10.24093/awej/AI.1](https://dx.doi.org/10.24093/awej/AI.1)
- Ayvazyan, N., Hao, Y., & Pym, A. (2024). Things to do in the translation class when technologies change: The case of generative AI. In *New Advances in Translation Technology: Applications and Pedagogy* (pp. 219-238). Singapore: Springer Nature Singapore.
- Braun, Virginia, and Clarke, V. (2006). "Using thematic analysis in psychology." *Qualitative research in psychology* 3.2 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Budi, I. S., Putrayasa, I. B., Wisudariani, N. M. R., & Sudiana, I. N. (2024). Peran Dan Tantangan Penggunaan Artificial Intelligence Dalam Inovasi Pengembangan Kurikulum Pembelajaran Bahasa Indonesia Masa Depan. *Learning: Jurnal Inovasi Penelitian Pendidikan dan Pembelajaran*, 4(4), 1188-1194.
- Budiharjo, B. (2024, December). Artificial Intelligence in Translation: The Menace, Promise, and Response to Technology and Superseded Practice. In *Third International Conference on Communication, Language, Literature, and Culture (ICCoLLiC 2024)* (pp. 681-694). Atlantis Press.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Fan, P., Gong, H., & Gong, X. (2024). *The Application of ChatGPT in Translation Teaching: Changes, Challenges, and Responses*. *International Journal of Education and Humanities*. DOI:10.54097/ijeh.v11i2.13530
- Gabriel, I., Manzini, A., Keeling, G., Hendricks, L. A., Rieser, V., Iqbal, H., ... & Manyika, J. (2024). The ethics of advanced ai assistants. *arXiv preprint arXiv:2404.16244*. Doi; <https://doi.org/10.48550/arXiv.2404.16244>
- Garcia, I., & Pena, M. I. (2011). Machine translation-assisted language learning: writing for beginners. *Computer Assisted Language Learning*, 24(5), 471-487.
- Hartini, R. D., Sakkir, G., & Sally, F. H. S. (2025). Students' perception On Using Ice Breaking

- To Influence Their Confidence In English Class. *Jurnal Vidya Cakra*, 1(1), 79-90.
- Hasanein, A. M., & Sobaih, A. E. E. (2023). Drivers and consequences of ChatGPT use in higher education: Key stakeholder perspectives. *European journal of investigation in health, psychology and education*, 13(11), 2599-2614. <https://doi.org/10.3390/ejihpe13110181>
- He, M. (2025). AI-Driven Paradigm Shift in Translation Education and Career Trajectories: Navigating Human-Machine Synergy in the Digital Era. *Education as Change*, 29, 13-pages. DOI: <https://doi.org/10.25159/1947-9417/19128>
- Islamiati, A. D., Dollah, S., & Sakkir, G. (2024). Students' Perception of the Use of Snowball Throwing Technique in Teaching Reading Skill. *ARRUS Journal of Social Sciences and Humanities*, 4(2), 145-151.
- Jiménez-Crespo, M. A. (2025). Human-Centered AI and the Future of Translation Technologies: What Professionals Think About Control and Autonomy in the AI Era. *Information*, 16(5), 387.
- Khan, I. A., Yu, Z., Birkök, M. C., & Bakar, A. Y. A. (Eds.). (2024). *Proceedings of the 2024 2nd International Conference on Language, Innovative Education and Cultural Communication (CLEC 2024)* (Vol. 853). Springer Nature.
- Kimera, R., Kim, Y. S., & Choi, H. (2024). Advancing AI with integrity: Ethical challenges and solutions in neural machine translation. *arXiv preprint arXiv:2404.01070*.
- Leon, C., Lipuma, J., & Oviedo-Torres, X. (2025, July). Artificial intelligence in STEM education: a transdisciplinary framework for engagement and innovation. In *Frontiers in Education* (Vol. 10, p. 1619888). Frontiers.
- Li, C., & Tekwa, K. (2025). Translation as a catalyst for foreign language learning: a self-regulated learning approach mediated by instructor feedback and peer collaboration. *Humanities and Social Sciences Communications*, 12(1), 1-17.
- Ling-Hui. (2022). Artificial Intelligence-Based Translation Technology in Translation Teaching. *Computational Intelligence and Neuroscience*, 2022(1), 6016752.
- Lund, B. D., Lee, T. H., Mannuru, N. R., & Arutla, N. (2025). AI and academic integrity: Exploring student perceptions and implications for higher education. *Journal of Academic Ethics*, 1-21. DOI; <https://doi.org/10.1007/s10805-025-09613-3>.
- Melisa, R., Ashadi, A., Triastuti, A., Hidayati, S., Salido, A., Ero, P. E. L., ... & Al Fuad, Z. (2025). Critical Thinking in the Age of AI: A Systematic Review of AI's Effects on Higher Education. *Educational Process: International Journal*, 14, e2025031.
- Nadim, M. A., & Di Fuccio, R. (2025). Unveiling the Potential: Artificial Intelligence's Negative Impact on Teaching and Research Considering Ethics in Higher Education. *European Journal of Education*, 60(1), e12929.
- Naveen, P., & Trojovský, P. (2024). Overview and challenges of machine translation for contextually appropriate translations. *Iscience*, 27(10).
- Nguyen, K. V. (2025). The use of generative AI tools in higher education: Ethical and

- pedagogical principles. *Journal of Academic Ethics*, 1-21.
- Nguyen, T. N. N., Tran, T. T., Nguyen, N. H. A., Lam, H. P., San Nguyen, H. M., & Tran, N. A. T. (2025). The Benefits and Challenges of AI Translation Tools in Translation Education at the Tertiary Level: A Systematic Review. *International Journal of TESOL & Education*, 5(2), 132-148.
- Ouyang, F., & Jiao, P. (2021). Artificial intelligence in education: The three paradigms. *Computers and Education: Artificial Intelligence*, 2, 100020.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). *Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533–544. <https://doi.org/10.1007/s10488-013-0528-y>
- Pudasaini, S., Miralles-Pechuán, L., Lillis, D., & Llorens Salvador, M. (2024). Survey on AI-generated plagiarism detection: The impact of large language models on academic integrity. *Journal of Academic Ethics*, 1-34.
- Pym, A. (2013). Translation skill-sets in a machine-translation age. *Meta*, 58(3), 487-503.
- Ramadilla, H. S., Surbakti, H. B., & Natsir, M. (2025). Artificial intelligence and linguistics: The synergy of English in science and technology. *CENDEKIA: Jurnal Ilmu Pengetahuan*, 5(1), 45-56. <https://doi.org/10.51878/cendekia.v5i1.4115>
- Rapa, A. A., Saja, I., & Azmi, A. (2024). The Use of Artificial Intelligence (AI) Translation Tools: Implications for Third Language Proficiency. *International Journal of Research and Innovation in Social Science*, 8(9), 1952-1960.
- Robbins, S. P. & Judge T. (2013). *organisational behaviour (15th ed.* Pearson South Africa.
- Shahmerdanova, R. (2025). Artificial Intelligence in Translation: Challenges and Opportunities. *Acta Globalis Humanitatis et Linguarum*, 2(1), 62-70.
- Sidiq, F. A., & Syafryadin, Syafryadin. (2023). *Students' Perception of Using DeepL for Translating English Text*. *Eltin Journal: Journal of English Language Teaching in Indonesia*
- Syaripudin, U., Syaparamadhany, F., Ibrati, S. I., Maulana, A., & Kurniati, U. (2025). AI Integration in EFL Teacher Education: Perceptions and Professional Development Needs. *INSPIRING*, 253-272. DOI: <https://doi.org/10.35905/inspiring.v8i2.14706>
- Szmyd, K., & Mitera, E. (2024). The impact of artificial intelligence on the development of critical thinking skills in students. *European Research Studies Journal*, 27(2), 1022-1039.
- Wang, L., Xu, S., & Liu, K. (2024). Understanding Students' Acceptance of ChatGPT as a Translation Tool: A UTAUT Model Analysis. *arXiv preprint arXiv:2406.06254*.
- Wang, Y. (2023). Artificial intelligence technologies in college English translation teaching. *Journal of psycholinguistic research*, 52(5), 1525-1544. <https://doi.org/10.1007/s10936-023-09960-5>
- Wang, Y. (2023). Artificial intelligence technologies in college English translation teaching. *Journal of psycholinguistic research*, 52(5), 1525-1544.

Yamada, M. (2023). Optimizing machine translation through prompt engineering: An investigation into ChatGPT's customizability. *arXiv preprint arXiv:2308.01391*.

Zakarneh, B. ., Annamalai, N. ., Said, N. A. ., & Aljabr, F. . (2025). Revolutionizing language learning through ChatGPT: An analysis of English language learners. *International Journal of English Language and Literature Studies*, 14(1), 1–16.