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INVESTIGATING THE USE OF AI-DRIVEN EDUCATIONAL TOOLS TO ENHANCE TRANSLATION SKILLS FOR THIRD-YEAR ENGLISH MAJORS

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ABSTRACT

In today's rapidly evolving educational landscape, the integration of technology—particularly Artificial Intelligence (AI)—has become an increasingly significant factor in language learning and teaching. For third-year English majors, translation is a core skill that requires not only linguistic proficiency but also deep cultural understanding, contextual interpretation, and the ability to transfer meaning accurately between languages. However, many students still struggle with key translation challenges such as limited vocabulary range, improper use of collocations, difficulty in maintaining stylistic consistency, and lack of real-time feedback. Traditional translation instruction methods, which often emphasize rote memorization and one-directional teacher-centered feedback, may not sufficiently address these challenges or cater to individual learning needs.

This study aims to investigate the effectiveness of AI-driven educational tools in enhancing translation skills among third-year English majors at a university in Vietnam. Specifically, the research explores how intelligent technologies—such as AI-based machine translation platforms (e.g., DeepL, Google Translate with context analysis), AI-assisted grammar and style checkers (e.g., Grammarly, Quillbot), and personalized vocabulary learning apps—can support learners in developing more accurate, context-sensitive, and stylistically appropriate translations. The research design involved a combination of quantitative and qualitative methods, including pre- and post-tests to measure translation performance, student surveys to gather feedback on user experience, and interviews to obtain deeper insights into learner perceptions.

Over a period of 10 weeks, participants engaged with selected AI tools during both classroom activities and independent practice sessions. The results demonstrated a marked improvement in translation accuracy, vocabulary expansion, and the ability to identify and correct semantic errors. Furthermore, learners reported increased motivation, confidence, and autonomy when interacting with AI-enhanced learning environments. Statistical analysis confirmed the significance of these gains, while qualitative responses highlighted the perceived usefulness and adaptability of AI tools for supporting individual learning paths.

The findings of this study suggest that AI-driven educational tools, when thoughtfully integrated into translation pedagogy, have the potential to not only enhance technical translation skills but also transform learner attitudes toward the translation process. This research provides valuable insights for educators, curriculum designers, and policy-makers seeking to modernize translation instruction and better prepare students for the demands of the globalized professional world.

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Chapter I. Introduction

1.1. Background and Rationale

In the rapidly evolving landscape of the 21st century, technology has become deeply embedded in educational frameworks across the globe, revolutionizing how we teach, learn, and interact with knowledge. Among the most transformative technological advancements in recent years, Artificial Intelligence (AI) has emerged as a powerful tool with the potential to reshape traditional educational practices. AI encompasses a broad range of technologies, from machine learning algorithms to natural language processing, which can adapt to student needs and enhance the learning experience. Over the past decade, AI has gained widespread adoption in various academic fields, but its application in language education has garnered particular attention. Language learning, traditionally a resource-intensive and time-consuming process, is now benefiting from AI-powered tools such as language learning applications, intelligent tutoring systems, and advanced machine translation services. These tools not only streamline the learning process but also facilitate more personalized, interactive, and efficient learning experiences.

Within this broader trend, the field of translation studies presents an area where AI's role is both timely and crucial. Translation is inherently complex, as it involves not only linguistic proficiency but also a deep understanding of cultural, contextual, and technical subtleties. As such, the ability to master both the source and target languages at a high level, while also capturing the intended meaning and tone, presents a significant challenge. In this context, AI-powered tools are emerging as valuable aids in translation courses. Machine translation platforms such as Google Translate, DeepL, and other automated systems are becoming integral components of language curricula, offering students instant translation suggestions, contextual analysis, and vocabulary enrichment. Moreover, AI applications can help students refine

their understanding of grammar, sentence structure, and even idiomatic expressions, which are often difficult to master.

For English majors specializing in translation, the ability to bridge linguistic and cultural gaps is paramount. The task of becoming proficient in translating complex texts from one language to another requires a deep understanding not only of grammar and vocabulary but also of the underlying cultural nuances and specialized terminologies. This is especially true for students pursuing translation as a field of study, where academic success hinges on their ability to produce high-quality, accurate, and contextually appropriate translations. However, the road to mastering translation is often fraught with challenges, as it demands both cognitive and linguistic skills at an advanced level. Traditional translation courses rely heavily on textbooks, lectures, and manual practice, but these methods may not always provide the dynamic and adaptive learning experience necessary for today's students.

This is where AI tools can significantly impact the translation learning process. By incorporating AI into translation education, students can benefit from a wide range of technological aids that assist with vocabulary acquisition, grammar correction, real-time contextual analysis, and even cultural adaptation of translations. For instance, AI-driven language models can analyze sentence structures in different languages, suggest alternate translations based on context, and highlight errors in real-time, thereby offering a learning experience that is both immediate and interactive. This personalized feedback can help students quickly identify their weaknesses and areas for improvement, which can be challenging in a traditional classroom setting.

Furthermore, AI tools have the potential to increase the speed and efficiency of the translation process. Traditionally, translation is a time-consuming endeavor that involves meticulous research, comprehension, and careful choice of words. AI tools, however, can drastically reduce this time by

providing rapid, accurate translations and assisting students in revising and refining their work. Not only does this foster a sense of progress and accomplishment among students, but it also enables them to focus on higher-order translation skills, such as adapting the tone, style, and cultural elements of a text, which are often the more difficult aspects of translation. In doing so, AI tools can elevate the learning process to a level of sophistication that was previously unattainable, offering students a more holistic, hands-on approach to mastering translation.

Ultimately, the role of AI in translation education is not just to replace traditional learning methods, but to complement them, creating a more comprehensive, engaging, and personalized learning environment. As the field of AI continues to advance, its potential to enhance the quality of translation education grows, making it an invaluable tool for English majors seeking to refine their linguistic abilities and succeed in the increasingly globalized field of translation. By embracing AI-driven tools, educational institutions can provide their students with a competitive edge, equipping them with the skills necessary to thrive in a digital-first, interconnected world where translation plays a vital role in communication and cultural exchange.

1.2. Research Questions

The focus of this research is to investigate the effectiveness of AI-driven tools in improving the translation skills of third-year English majors, particularly those enrolled in translation courses. Translation, being a complex process that requires not only linguistic competence but also cultural awareness, contextual understanding, and technical knowledge, presents a unique challenge in language education. Given the increasing prevalence of AI in education, particularly within the domain of language learning and translation, it is important to understand how AI tools can support students in overcoming these challenges. To achieve this, the research will attempt to answer the following key questions:

1.2.1. How do AI-powered tools impact the accuracy and overall quality of student translations?

This research question is central to evaluating the effectiveness of AI in improving students' translation output. It seeks to determine whether the use of AI-driven platforms results in a demonstrable enhancement in the linguistic and semantic quality of student translations. Specifically, the study will assess improvements across several dimensions of translation quality, including lexical precision, grammatical accuracy, syntactic coherence, idiomatic usage, and fidelity to source text meaning. In addition, the study will evaluate how effectively AI tools manage cultural nuances, tone, and register, which are often challenging for learners. Comparative analyses will be conducted between translations produced manually and those assisted by AI, using a rubric-based assessment and possibly involving expert reviewers. By doing so, the research will provide empirical evidence on whether AI support elevates the standard of student translations, or if it simply masks underlying gaps in student competence.

1.2.2 To what extent do students become dependent on AI tools in their translation learning process?

While AI tools can enhance productivity and accuracy, their overuse may lead to cognitive passivity and skill atrophy. This question addresses the potential for student dependency on such technologies and explores how habitual reliance might affect the development of independent translation abilities. The study will explore student usage patterns, such as the frequency and contexts in which they turn to AI tools, and whether they attempt initial drafts themselves or rely entirely on AI-generated suggestions. Furthermore, it will analyze students' perceptions of their own abilities with and without AI assistance, investigating whether confidence diminishes when AI is removed from the process. The psychological aspect of dependence will also be examined—specifically, how much students trust AI outputs compared to their own judgment. Ultimately, the goal is to assess

whether the use of AI supports skill acquisition or fosters dependency that hinders critical linguistic thinking and decision-making in translation tasks.

1.2.3. How do AI tools influence the dynamics of the translation learning process?

This question broadens the focus to explore how AI affects the overall structure, interaction, and cognitive engagement within the translation learning environment. The integration of AI into educational workflows has the potential to reshape the dynamics of learning by introducing new modes of feedback, pacing, and collaboration. The study will investigate how AI tools influence students' approaches to problem-solving during translation, their willingness to experiment with language, and their capacity to reflect critically on their linguistic choices. It will also examine the potential for AI to either encourage or diminish active learning, particularly through features such as auto-correction and predictive text, which may streamline the process but reduce cognitive involvement. In addition, this question considers classroom dynamics: for instance, how AI use affects peer collaboration, instructor feedback, and student-teacher interaction. By exploring these areas, the study aims to determine whether AI tools support a more engaged, autonomous learning experience or risk creating a passive, mechanized approach to translation.

1.2.4. How can AI technology be effectively integrated into the translation process for educational purposes?

Beyond analysis, this research also seeks to offer constructive insights into how AI tools can be pedagogically and ethically integrated into translation education. This question focuses on identifying best practices for the use of AI in ways that enhance, rather than replace, human cognitive processes involved in translation. It aims to explore strategies for combining AI support with traditional learning methods, such as pre-editing and post-editing exercises, critical comparison tasks, and collaborative review of AI-generated outputs. The study will consider how instructors can design assignments that leverage AI without compromising skill

development or academic integrity. It will also explore the need for explicit instruction on the limitations of AI—such as its challenges in interpreting figurative language, context-dependent meaning, and cultural nuances. This includes investigating how to foster digital literacy among students so they can critically assess AI outputs rather than accept them uncritically. By focusing on the "how" of integration, this research aims to contribute practical frameworks for the responsible and effective use of AI in translation curricula.

1.2.5. Which AI features do students find most useful in improving their translation performance?

Different AI platforms offer a range of functionalities that can aid language learners in distinct ways. This question is designed to identify which specific features students perceive as most helpful in supporting their translation work and why. Features under consideration include real-time grammar and spelling corrections, synonym and rephrasing suggestions, machine-generated draft translations, usage examples in context, tone/style detection, and feedback on fluency and coherence. The study will collect both qualitative and quantitative data on student preferences, exploring not only which tools are used most frequently but also which are considered most educationally valuable. Furthermore, it will investigate whether the perceived usefulness of these features varies depending on the translation task type (e.g., literary vs technical translation), student language proficiency, or individual learning styles. Understanding which features students value most can inform the development of more targeted educational tools and guide instructors in selecting appropriate AI resources to integrate into their teaching.

1.3. Research Significance

The integration of Artificial Intelligence (AI) into educational practices represents a significant advancement, particularly in the context of language learning and translation courses. These disciplines are inherently demanding, requiring not only linguistic proficiency but also cultural and contextual understanding, as well as significant time and effort. As globalization continues to increase the need for multilingual communication, the ability to learn and apply languages efficiently becomes even more crucial. Traditional methods of language and translation education, though effective to some degree, often face challenges in keeping pace with the increasing complexity of language use and the evolving needs of learners. AI-driven tools hold the potential to address these challenges by enhancing the educational experience in innovative ways, offering both students and instructors the opportunity to significantly improve the effectiveness and efficiency of the learning process.

This study aims to explore the application of AI-powered tools in translation courses, with the objective of identifying their potential benefits and drawbacks within the educational setting. By investigating these tools, this research will offer valuable insights into how AI can be leveraged to enhance the accuracy, fluency, and overall quality of translations produced by students. AI tools have the capability to automate routine tasks, provide real-time feedback, and offer contextual suggestions, thus allowing students to focus on higher-level cognitive processes such as critical thinking, interpretation, and problem-solving. Additionally, AI tools can also help students improve their speed in translation, which is often a significant challenge in the field.

In addition to improving the quality of students' work, the study will also examine how AI can assist instructors in optimizing their teaching methodologies. AI-driven platforms can facilitate personalized learning experiences by adapting to the individual needs and progress of each student. Furthermore, these tools can help educators track students' performance in real-time, identify areas where students are struggling, and offer targeted interventions. By automating administrative tasks such as grading and feedback, AI can also free up more time for instructors to engage in meaningful, one-on-one interactions with students, thereby enhancing the overall educational experience.

However, integrating AI into language and translation education is not without its challenges. One of the key objectives of this study is to identify the limitations and potential drawbacks of AI tools in this context. These may include concerns related to the accuracy and reliability of AI-generated translations, especially when dealing with complex or nuanced language, as well as the potential for over-reliance on technology by students. Additionally, there may be challenges in aligning AI tools with existing curricula and ensuring that instructors have the necessary skills and training to incorporate these technologies effectively into their teaching practices. This research will address these concerns by providing a comprehensive analysis of the barriers to AI adoption in translation courses and offering strategies to overcome these challenges.

The significance of this research extends beyond the immediate context of language and translation education. The findings of this study have the potential to contribute to the broader discourse on the integration of AI in education, shedding light on the ways in which AI can complement traditional teaching methods and improve educational outcomes across various disciplines. By bridging the gap between conventional pedagogical approaches and modern technological advancements, this study aims to help educators and institutions better understand how to integrate AI tools into their teaching strategies in a way that enhances learning experiences without compromising the human elements of education. The research will also provide valuable insights into the future of language learning and translation education, offering a framework for the effective, sustainable, and ethical use of AI technologies in these fields.

In conclusion, this study aims to provide a detailed exploration of the role that AI-driven tools can play in transforming the landscape of language and translation education. By analyzing both the opportunities and challenges that come with integrating AI, this research will offer actionable recommendations for educators, institutions, and policymakers seeking to harness the potential of AI in the classroom. Ultimately, the findings will contribute to the ongoing development of

teaching practices that are not only more efficient and effective but also better suited to meet the needs of a rapidly evolving globalized world.

The ultimate goal of this research is to assess whether the integration of AI tools into translation courses enhances students' translation abilities and contributes to improved academic performance. By answering these questions, the study will explore how AI tools can be effectively integrated into language education and whether they provide meaningful support in the development of translation skills. Furthermore, the research will explore the broader implications of AI in higher education, considering its potential to revolutionize not only translation studies but also language learning more generally. It will also address the challenges and limitations that may arise from the adoption of AI tools, ensuring a balanced perspective on the role of technology in education.

In sum, this study aims to offer insights into the practical and pedagogical benefits of using AI-driven tools in translation education, focusing on their capacity to improve both the quality of translations and the overall linguistic competence of students. The research will also explore how student perceptions of AI tools influence their effectiveness, providing a comprehensive understanding of their role in enhancing translation learning outcomes.

Chapter II. Literature Review

2.1. Definition of Translation

Translation is the process of transferring written or spoken content from one language (the source language) into another (the target language). It goes beyond simply replacing words and involves conveying meaning, tone, style, and cultural nuances. At its core, translation is an act of communication that requires understanding both the linguistic structures of the languages involved and the cultural context in which the message is situated.

Traditionally, translation has been seen as finding linguistic equivalents between languages. Eugene Nida (1964) introduced the concept of "dynamic equivalence," which focuses on conveying the intended meaning of the source text in a natural and fluent manner in the target language. This approach prioritizes readability and the effect on the target audience rather than strict word-for-word translation. In contrast, Catford (1965) proposed a more formal definition that emphasized linguistic equivalence, where translation involves replacing source text with equivalent material in the target language. This view prioritizes grammatical and lexical accuracy but has been critiqued for not considering cultural or contextual factors that influence meaning.

Modern translation theories, such as those proposed by Lawrence Venuti (1995), have expanded this definition by recognizing translation as a cultural act, not just a linguistic one. Venuti's concepts of "foreignization" and "domestication" highlight how translations can either retain the foreignness of the original text or adapt it to fit the norms and expectations of the target culture. This cultural dimension shows that translation is often a negotiation between the source and target languages, influenced by societal expectations and the translator's choices.

Furthermore, translation is a cognitive process that involves comprehension, analysis, and interpretation of the source text, followed by encoding that meaning in the target language. It requires not only linguistic expertise but also an understanding of the broader context, including social, historical, and cultural

factors. In literary or creative translation, this cognitive effort is paired with a creative element, as the translator must also preserve the tone, style, and emotional impact of the original text while adapting it to the target language.

2.2. Essential Skills in Translation

Translation is a multifaceted activity that demands a wide array of skills. These skills go beyond simple linguistic competence; they encompass cultural knowledge, cognitive abilities, and the capacity to adapt and solve problems creatively. Successful translation requires a translator to skillfully navigate both languages while understanding the nuances and contexts in which they are used. Below are the essential skills required for effective translation:

2.2.1 Linguistic Proficiency

The foundation of translation lies in linguistic proficiency. A translator must have a deep command of both the source and target languages, with an extensive vocabulary, understanding of grammar, syntax, and idiomatic expressions. A translator's ability to comprehend and produce accurate translations depends on this linguistic knowledge.

Linguistic proficiency involves more than knowing individual words; it requires understanding sentence structures, grammatical rules, and the meaning of words in different contexts. For instance, the translator must be capable of recognizing how different verb tenses, word order, or plural forms can change the meaning of a sentence in both languages. This level of fluency allows the translator to create texts that are not only accurate but also natural-sounding in the target language. Furthermore, effective translators must understand stylistic differences between languages and the impact these can have on the overall tone and readability of a translation.

In addition, understanding specialized terminology is crucial for certain types of translation. For example, translating legal, medical, or technical texts requires knowledge of domain-specific vocabulary to ensure that the translation is not only

linguistically correct but also precise in its field. Without this expertise, a translator may struggle with conveying the correct meaning in specialized contexts, potentially leading to errors or misinterpretation.

2.2.2 Cultural Competence

Translation is inherently cultural, as it involves bridging the gap between different worldviews. A translator must possess cultural competence, which means being aware of the social, historical, and cultural contexts that shape the language and the text being translated. Cultural competence is important because language is deeply intertwined with the culture from which it originates, and these cultural elements often do not have direct equivalents in the target language.

A translator must recognize cultural references, customs, idioms, and societal norms embedded within the source text. For instance, a reference to a specific historical event or a cultural practice in the source language may not resonate or even make sense in the target language without explanation or adaptation. Therefore, a translator must decide whether to retain the foreign elements, provide an explanation, or adapt them in a way that is understandable and relevant to the target audience. These decisions involve careful cultural mediation to ensure that the translated text is both accurate and culturally appropriate.

Cultural competence also extends to understanding the nuances of social conventions such as politeness forms, gender roles, and context-specific communication styles. Failure to account for these cultural factors can lead to translations that may seem out of place, awkward, or even offensive to the target audience. Thus, translators must continuously develop their cultural awareness to navigate such challenges effectively.

2.2.3 Research Skills

Translation often involves encountering unfamiliar words, specialized terminology, or cultural references that require additional investigation. Research skills are indispensable for a translator to ensure the accuracy and relevance of their work. Good translators are not just linguists; they are also adept researchers

who can find the necessary resources to clarify doubts, verify facts, and understand difficult terms.

In particular, translators must be able to conduct research into specialized fields such as law, medicine, or technology. This often involves consulting glossaries, reference books, academic journals, or even experts in the field. The research process can also include checking historical facts or understanding cultural contexts that might influence the translation of certain phrases or concepts.

Effective research ensures that the translation is not only linguistically correct but also contextually relevant. Research skills are crucial for both accuracy and credibility, especially when the translator is tasked with translating complex or technical content. In cases where the source text involves local dialects or specialized jargon, a translator's ability to identify appropriate equivalents in the target language can significantly impact the translation's overall quality.

2.2.4 Attention to Detail

Accuracy in translation requires extreme attention to detail. Even minor mistakes in a translation can lead to significant misunderstandings or alterations of meaning. Whether it is a slight misinterpretation of a word, improper punctuation, or a translation error that alters the tone, every aspect of the text must be carefully checked. Translators must be vigilant about every detail in the text, from grammar and syntax to punctuation and spelling.

Attention to detail also means ensuring consistency throughout the translation. This is particularly important when translating longer texts or projects that involve multiple sections or translators. Maintaining consistent terminology, style, and tone is essential for producing a coherent and professional final product. For instance, when translating technical manuals or academic texts, maintaining consistent use of terminology is critical for clarity. Translators often make use of glossaries or translation memory tools to help them maintain this consistency.

Additionally, attention to detail is essential when working with different types of text formats. Translators must ensure that the translation preserves the structure, layout, and formatting of the original document while adapting it to the target language. Whether the text is a website, legal document, or advertisement, preserving its visual integrity while ensuring linguistic accuracy is a key aspect of translation.

2.2.5 Adaptability and Creativity

Translation is not only a cognitive process but also a creative one. Translators often face challenges when they encounter concepts or expressions in the source language that do not have direct equivalents in the target language. In such cases, creativity and adaptability are crucial. The translator must find ways to adapt these phrases, idioms, or cultural references to make them relatable and meaningful to the target audience.

Creative problem-solving is often needed when translating metaphorical language, humor, or wordplay, as these elements frequently do not translate easily. A translator may need to rethink the original message in creative ways that retain the essence of the original while making it understandable and engaging in the target language. For example, translating a joke or pun might require inventing a new wordplay that resonates with the target culture's sense of humor.

This creativity also extends to literary translation, where the translator must preserve the tone, voice, and literary style of the author while adapting it to another language. A good literary translator is not only faithful to the content of the source text but also sensitive to its literary qualities and able to recreate them in the target language in a fresh and meaningful way.

2.2.6 Subject Matter Expertise

For many types of translation, especially technical, legal, or medical texts, subject matter expertise is a critical skill. Translators who specialize in a particular field must have a thorough understanding of its terminology, concepts, and industry-

specific language. Without this expertise, a translator may struggle to accurately convey the specialized knowledge required in these fields.

For example, legal translation requires knowledge of the legal systems of both the source and target countries, as well as familiarity with legal terminology. Similarly, in medical translation, a translator must understand medical terms and be able to convey complex concepts clearly and accurately. A translator's subject matter expertise ensures that the translation is precise, avoids misunderstandings, and meets the standards required by the field.

In some cases, translators may need to collaborate with subject-matter experts to ensure the highest accuracy, particularly when the content is highly specialized or technical.

2.3. From Traditional Competencies to Technological Enhancement: Bridging Human Translation Skills and AI-Driven Educational Support

Having established a thorough understanding of the core competencies essential to translation—such as linguistic proficiency, cultural literacy, analytical reasoning, and contextual sensitivity—it becomes necessary to consider how these skills are cultivated within an educational setting. For third-year English majors, particularly those engaged in formal translation training, the development of such abilities requires not only theoretical grounding but also continuous, scaffolded practice with diverse text types and translation challenges.

In recent years, the dynamics of translation pedagogy have begun to shift in response to advances in educational technology, especially with the emergence of artificial intelligence-driven tools. Unlike traditional resources—such as bilingual dictionaries, printed glossaries, or instructor-led exercises—AI-based platforms offer interactive, adaptive, and data-informed learning environments. These tools do not merely provide automated translations; they actively support the learning process by offering real-time feedback, context-aware suggestions, and opportunities for reflection and correction.

As third-year English majors approach the more advanced stages of their academic training, the integration of such tools can serve as a pedagogical bridge between foundational theory and professional practice. For example, platforms powered by neural machine translation or natural language processing are now capable of highlighting syntactic patterns, detecting idiomatic expressions, and even suggesting stylistic revisions based on genre conventions. This capacity to simulate aspects of professional translation workflows within the classroom allows learners to internalize industry-relevant standards while still benefiting from the guidance of instructors and the collaborative structure of the classroom.

Importantly, however, the pedagogical integration of AI in translation instruction must be strategic and critically informed. While these tools have the potential to enhance learner autonomy, engagement, and precision, they also present new challenges. Among them are overreliance on automated outputs, reduced motivation for deep linguistic analysis, and the risk of accepting machine-generated translations as authoritative without sufficient critical evaluation. For learners still developing their linguistic intuition and cultural competence, such as third-year undergraduates, these risks underscore the need for instructor mediation and metacognitive scaffolding in AI-assisted environments.

The following chapter will examine in detail how AI-driven educational tools are currently being employed in translation training, particularly for undergraduate learners. It will explore both the pedagogical opportunities and the practical limitations of these tools, and assess their impact on the acquisition and refinement of translation skills among third-year English majors. By contextualizing these developments within both theoretical and empirical frameworks, the study seeks to offer a nuanced understanding of how artificial intelligence is reshaping translation education—and how it can be leveraged to support more effective, personalized, and contextually relevant learning outcomes.

2.4. The Role of AI in Education

Artificial Intelligence (AI) has rapidly become an integral part of modern educational systems, offering a wide range of benefits that have revolutionized the way teaching and learning occur. In particular, AI technologies have shown immense promise in personalizing learning experiences and improving the efficiency of assessment processes. AI tools have the unique ability to analyze students' learning behaviors in real-time, adapt to their individual needs, and provide tailored content that suits their learning styles. This level of personalization allows for more effective and engaging educational experiences, as students can progress at their own pace, focusing on areas where they need improvement.

One of the most significant contributions of AI in education is through the use of machine learning systems. These systems are designed to adapt and improve based on the data they receive, thereby creating a more dynamic and responsive learning environment. As these tools collect more data over time, they become increasingly effective at addressing the specific needs of individual students. This adaptability is particularly useful in language education, where the complexity and nuance of language learning require constant feedback and personalized instruction. AI-powered tools can support students in various aspects of language acquisition, from vocabulary and grammar to speaking and comprehension.

In the context of language education, AI has been applied in a variety of ways, ranging from intelligent tutoring systems to natural language processing (NLP) and automated translation systems. These AI applications enable students to engage with language in more interactive, personalized, and efficient ways, enhancing both their learning experiences and outcomes. By using AI technologies, educators can create learning environments that are more inclusive, as these tools cater to diverse learning styles and capabilities.

Some notable examples of AI tools used in language learning include:

- Chatbots: These AI-driven applications simulate real-time conversations with users, allowing students to practice their language skills in a controlled, interactive environment. Chatbots can offer instant feedback on pronunciation, vocabulary usage, and sentence structure, helping students build confidence in their conversational abilities without the need for a human instructor.
- Automated Grammar Checkers: Tools such as Grammarly, ProWritingAid, and others assist students by analyzing their writing and identifying grammatical, syntactical, and stylistic errors. These AI-driven tools offer suggestions for corrections, enabling students to improve their writing skills through consistent feedback. By providing immediate and personalized recommendations, these systems help students understand their mistakes and learn from them in real-time.
- Machine Translation Systems: Platforms like Google Translate, DeepL, and other similar tools provide students with quick, efficient translations and real-time suggestions for corrections. These AI-powered systems help students translate texts more effectively, providing immediate access to resources that can improve their understanding of foreign languages. While not perfect, these tools are invaluable for students seeking to bridge the gap between languages and enhance their comprehension of complex texts.

When properly integrated into the curriculum, AI tools in language education can have a significant impact on student learning. These technologies are capable of providing real-time feedback, allowing students to correct errors and refine their skills continuously. By adapting to each student's learning pace and offering personalized suggestions, AI-powered systems promote greater language proficiency and can contribute to improved overall learning outcomes. Furthermore, AI tools can enhance the overall efficiency of the educational process by automating tasks that would otherwise take considerable time,

allowing instructors to focus on more meaningful interactions with students and offering additional support where necessary.

As AI continues to advance, it is likely that its role in education will expand even further, presenting new opportunities for enhancing language learning experiences. The ability of AI to offer highly personalized, adaptive, and efficient learning tools represents a significant shift in the way education is delivered. These innovations not only promise to improve the learning process for students but also to transform the role of educators, providing them with new tools to support and guide their students effectively.

2.5. AI in Translation and Language Learning

The integration of Artificial Intelligence (AI) in translation studies has seen considerable growth, with machine translation (MT) tools such as Google Translate and DeepL becoming increasingly popular and widely used in both academic and professional settings. These AI-powered tools utilize sophisticated algorithms, including neural machine translation (NMT) models, to provide fast and often accurate translations between a multitude of languages. Their widespread use has made translation more accessible, enabling individuals and organizations to quickly translate large volumes of text without the need for human intervention. This is especially beneficial for students and language learners, as it allows them to rapidly translate texts and gain insights into the meaning of words and phrases in different languages.

Despite the impressive advancements of these tools, there are inherent limitations that must be considered. One of the primary challenges faced by AI-driven translation systems is their inability to handle idiomatic expressions, cultural nuances, and context-dependent meanings effectively. While machine translation has improved in terms of accuracy for standard texts, it often struggles when translating phrases that have specific cultural or contextual significance. Idiomatic expressions, slang, humor, and regional variations in language remain difficult for AI systems to translate accurately, as these elements require not only linguistic

knowledge but also a deep understanding of the culture and context in which the language is used. As a result, translations generated by AI tools may lack the subtlety and richness of meaning that human translators can provide.

In addition to these challenges, AI-powered translation tools can sometimes produce translations that are overly literal, missing the intended tone or style of the original text. This highlights the importance of human expertise in translation, as professional translators rely on their knowledge of the target language and culture to produce translations that are not only accurate but also contextually appropriate. While AI tools can assist with the initial stages of translation, they cannot fully replicate the creativity, intuition, and cultural sensitivity that human translators bring to the task.

Previous studies in the field of translation studies have explored how AI can be leveraged to enhance the translation process by reducing the time spent on manual translation and increasing the consistency of translations. One of the significant benefits of AI tools in this regard is their ability to provide quick translations, enabling students to work more efficiently and focus on refining their understanding of complex linguistic structures. By automating routine translation tasks, AI systems can help students streamline their workflow, allowing them to allocate more time to analyzing the deeper meaning of texts, improving their language skills, and engaging in critical thinking about translation choices.

Moreover, AI-powered translation tools can also suggest alternative translations, giving students the opportunity to explore different interpretations of a text. This feature encourages students to consider various translation options, examine the differences in meaning, and learn from the process of making informed decisions. These tools thus promote a more interactive and dynamic learning experience, as students can compare and contrast different translations, learning from the suggestions provided by AI systems and gaining a deeper understanding of the subtleties of language.

Despite these advantages, it is essential to recognize that AI tools should be viewed as supplementary aids rather than replacements for human translators. AI-driven translation systems excel at providing quick translations for standard texts, but they are not capable of replicating the higher-order skills and judgment required in professional translation. Human translators bring creativity, cultural awareness, and a deep understanding of context to their work, ensuring that translations are not only accurate but also culturally sensitive and contextually appropriate. Therefore, while AI tools can significantly enhance the translation process, they should be used in conjunction with human expertise, rather than as a substitute.

In conclusion, AI-powered translation tools have made remarkable advancements in recent years, offering language learners and professionals the ability to quickly translate and understand texts across various languages. However, these tools are not without their limitations, particularly in dealing with idiomatic expressions, cultural nuances, and context-dependent meanings. AI tools can be incredibly helpful in improving efficiency, consistency, and providing alternative translation options, but they should be viewed as tools to assist human translators rather than replace them. Moving forward, the challenge will be to find effective ways to integrate AI into the translation process while still preserving the important role of human expertise in ensuring the quality and accuracy of translations.

2.6. Challenges in Translation Skills Development for English Majors

Translation is a highly complex and multifaceted skill that requires not only linguistic expertise but also a deep understanding of cultural nuances, subject matter, and the ability to convey meaning with accuracy and nuance. For English majors, the development of translation skills can be particularly challenging due to the demands of mastering both the source and target languages at a sophisticated level, while simultaneously navigating cultural, contextual, and thematic elements. As they progress through their studies, English majors often

encounter several significant challenges in developing their translation abilities, including difficulties with grammar and syntax, vocabulary, and translation style.

- Grammar and Syntax: Even advanced learners of a foreign language may struggle with the intricacies of grammar and syntax when translating. Complex sentence structures in the source language may not have direct equivalents in the target language, requiring students to make difficult decisions about how to restructure sentences without losing meaning. For example, languages such as German or French have flexible word order or specific grammatical rules (e.g., gendered nouns, verb tenses, or word agreements) that do not easily translate into English. English majors often find themselves needing to go beyond simply understanding individual words, requiring them to think critically about sentence structure and grammar in both languages. This can be particularly challenging when dealing with languages that differ significantly in syntax, leading to potential errors or awkward phrasing in the translation.
- Vocabulary: One of the most difficult aspects of translation is ensuring that the correct terms are used in the target language, especially when dealing with specialized vocabulary, idiomatic expressions, or culturally significant terms. Words and phrases may have multiple meanings depending on the context, and finding the precise equivalent in the target language can be a daunting task. Furthermore, some words may not have direct translations at all, especially when considering cultural or regional differences. For instance, translating legal, scientific, or technical terms requires a specialized understanding of the subject matter, which many English majors may not possess at an advanced level. Translating culturally rich or context-dependent expressions, such as idioms, slang, or historical references, presents another challenge, as these terms may not have an equivalent in the target language, making the translation both more challenging and less accurate.
- Translation Style: Capturing the tone, intent, and emotional undertone of the original text while adapting it to the target language is one of the most subtle and

difficult aspects of translation. Translation style goes beyond word-for-word equivalence and requires a deep understanding of the writer's voice and intent. For example, a literary translation may require a delicate balance between maintaining the beauty of the source text and ensuring the translated version reads smoothly in the target language. Similarly, technical translations require precision and clarity, while maintaining the correct tone and style appropriate for the intended audience. English majors often face the challenge of preserving the integrity and nuances of the source text, which can be particularly difficult when translating works that involve a strong cultural or emotional component.

The Role of AI Tools in Addressing These Challenges:

AI-driven tools have proven to be valuable aids in helping students overcome many of these challenges. Machine translation systems like Google Translate, DeepL, and specialized AI tools for grammar correction can offer instant feedback to students, allowing them to identify errors in syntax, vocabulary choices, and sentence structure. These tools are especially useful for beginners and intermediate students who may struggle with complex sentence constructions or unfamiliar vocabulary. AI can also suggest alternative translations, helping students explore different ways to convey meaning in the target language and encouraging them to consider the context and nuances of the text more carefully.

For example, AI-driven grammar checkers can help students detect errors in tense usage, word order, or subject-verb agreement, which are common challenges in translation. Similarly, machine translation systems can provide instant translations of specialized terms and phrases, assisting students in selecting the most accurate equivalents based on context. These systems can also suggest alternative translations for idiomatic expressions, helping students understand how such expressions might be rendered in the target language.

Despite the significant benefits of AI tools, it is important to recognize that these technologies should be viewed as supplementary aids rather than substitutes for traditional methods of learning and teaching translation. AI tools are excellent for

providing real-time feedback and assisting with the technical aspects of translation, such as grammar correction or vocabulary selection, but they cannot replace the nuanced understanding that human translators possess. The creativity, cultural awareness, and intuition that human translators bring to the task are essential components of effective translation, especially when dealing with complex or culturally sensitive material. Therefore, the most effective approach to translation education involves combining the strengths of AI-driven tools with traditional methods, such as classroom instruction, guided practice, and critical analysis.

Traditional teaching methods allow students to engage with the material more deeply, fostering critical thinking and problem-solving skills that are essential for becoming skilled translators. Teachers can provide context, guidance, and personalized feedback that AI tools are not capable of offering. In this way, a balanced approach that incorporates both technological tools and human expertise can ensure that English majors develop well-rounded translation skills that go beyond simply using AI tools to translate texts.

In conclusion, the development of translation skills for English majors is fraught with challenges, including mastering grammar and syntax, selecting appropriate vocabulary, and preserving translation style and intent. While AI-driven tools can assist in overcoming some of these obstacles by offering real-time feedback and alternative translations, they should be used as complementary resources rather than as replacements for traditional learning. By combining AI tools with the essential human elements of translation education, English majors can improve their skills and better prepare for the complex task of translating a wide variety of texts with accuracy, creativity, and cultural sensitivity.

Chapter III. Methodology

3.1. Research Design

This study will adopt qualitative data collection techniques to evaluate the effectiveness of AI-driven tools in enhancing the translation skills of third-year English majors. By employing this integrated approach, the research aims to provide a nuanced and comprehensive understanding of the impact of AI tools on translation education, offering insights from subjective experiences. This method framework allows for a more complete exploration of AI's role in translation education, shedding light on both the tangible improvements in student performance and the personal perceptions of students regarding the tools' effectiveness.

Qualitative Data Collection:

The qualitative component of the study will be dedicated to capturing the lived experiences of students and their perceptions regarding the role of AI tools in enhancing their translation skills. To collect this data, the study will employ semi-structured interviews and focus group discussions with a select group of participants. These methods will provide in-depth insights into how students engage with AI-driven tools, including the perceived benefits and challenges they experience.

The interviews and focus groups will cover a range of topics, such as:

- Students' attitudes towards AI tools: Do they view them as valuable assets to their learning process? How do they feel about AI as a supplement to human instruction?
- Perceived improvements in translation performance: How do students feel their translation accuracy, fluency, and ability to preserve stylistic elements have improved due to the use of AI tools?

- **Specific uses of AI tools:** What types of tasks or translation challenges (e.g., grammar correction, vocabulary enhancement, idiomatic expressions) do students feel AI tools help most with?
- Challenges and limitations: What are the difficulties students encounter while using AI tools? Are there areas where the tools fall short in assisting them with more complex translation tasks?

A key aspect of the qualitative data collection will involve exploring any differences in the way AI tools are used for various types of texts. For example, the study will examine whether literary translations, which require sensitivity to tone, style, and creativity, benefit more from AI assistance than technical translations, which demand accuracy and clarity. This analysis will help determine if AI tools are more effective in certain types of translation tasks than others.

3.2. Target Group:

The study will specifically focus mainly on third-year English majors who are currently enrolled in translation courses. This group is ideal for the study because these students have already acquired a solid foundation in both their source and target languages, as well as a familiarity with basic translation techniques. Third-year students are typically expected to tackle more complex translation tasks and apply more sophisticated strategies in their work. Consequently, they are well-suited to assess the effectiveness of AI tools in enhancing translation performance, as their existing knowledge base allows them to benefit from the additional support that AI can offer.

Furthermore, these students are in a prime position to provide valuable feedback on the usefulness of AI tools in translation education. Their prior coursework in translation ensures that they understand the nuances of language and translation theory, making them able to assess how well AI tools align with the demands of translation tasks. Additionally, their experience with various translation strategies and techniques will allow them to identify specific areas where AI tools either excel or fall short in improving their translation quality.

3.3. The research objective of the questions

The primary objective of the questions in this study is to gain a comprehensive understanding of university students' engagement with artificial intelligence (AI) tools in the context of their academic activities. The questions are designed to explore several key dimensions of this engagement, both in terms of practical usage and subjective perception. Specifically, the questions are designed to:

- Examine students' past and present experiences with AI tools in academic settings, including how their use of these technologies has evolved over time.
- Identify the frequency and purposes for which students engage with AI tools, such as for writing assistance, research, content summarization, idea generation, or language translation.
- Assess the perceived effectiveness of AI tools in supporting academic performance, and explore the level of reliance students may have developed on these tools.
- Understand students' personal perceptions of the future of AI in education, including:
 - Their expectations regarding the role of AI in future learning environments;
 - o Their awareness of current limitations or shortcomings of AI tools;
 - Their ideas or suggestions for future improvements of such technologies.

Through these objectives, the study aims to offer a holistic understanding of how AI tools are shaping student learning, both in terms of opportunities and potential challenges.

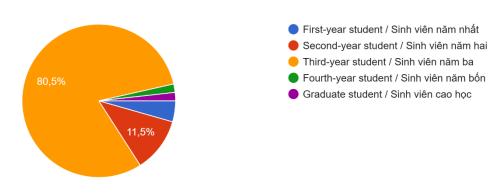
Chapter IV. Results and Discussion

4.1. Findings from Data Collection

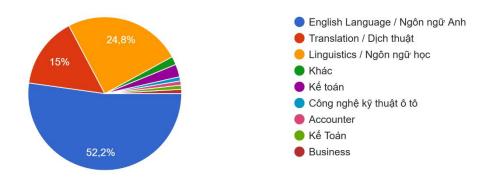
This section presents a thorough and in-depth analysis of the data gathered from 113 participants, the majority of whom were third-year English majors. The results provide a comprehensive understanding of how students engage with and perceive AI-based educational tools, particularly in the context of language learning and translation skills development. The analysis explores both quantitative data (numerical responses) and qualitative insights, providing a more holistic view of AI's impact on the students' academic experiences.

4.1.1. Participant Demographics

1. What is your year of study? Bạn đang học năm thứ mấy?



2. What is your major? Chuyên ngành của bạn là gì?



Among the 113 respondents, a clear majority (80.5%) identified as third-year students, which confirms that the study's focus on this specific group was well-founded and relevant. This demographic distribution suggests that these students are at a crucial stage in their education, having acquired foundational language skills and translation techniques. The findings are thus reflective of the experiences and challenges faced by students who are preparing for more advanced language and translation tasks. The significant representation of third-year students reinforces the relevance of the study's findings, as they represent an academically mature group capable of providing valuable insights into the impact of AI tools.

In terms of academic specialization, a significant majority (52.2%) reported that they were majoring in English Language. This indicates that over half of the study's respondents are pursuing a program primarily focused on general English language skills, encompassing areas such as grammar, vocabulary, listening, speaking, reading, and writing. This concentration of English Language majors suggests that many of these students may be encountering AI tools like machine translation or language-learning applications as supplementary aids rather than core elements of their formal training. The high percentage also implies a broad base of learners whose experiences with AI tools might vary depending on their personal study goals and course structures, offering diverse perspectives on how these tools support or challenge traditional learning processes.

Following this group, 24.8% of respondents identified as Translation majors. This is a substantial portion, nearly a quarter of all participants, and represents students whose academic focus is directly aligned with the core subject of this study—translation. These students are likely to engage with AI tools more critically and frequently, as translation practice forms an essential part of their curriculum. Their insights are especially valuable in assessing the practical impact of AI-assisted translation tools, such as Google Translate or DeepL, on skill development, learning strategies, and professional readiness. The presence of this group within

the sample strengthens the study's foundation by ensuring representation from those with specialized training in the field being investigated.

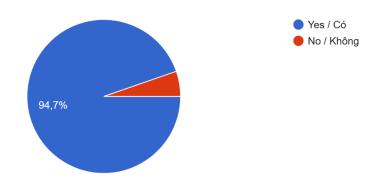
In addition to English Language and Translation majors, a small percentage of respondents reported studying Linguistics. Although this group constitutes a minor share of the total, its inclusion is important. Students in Linguistics often study the structure, function, and evolution of language, and their academic training may equip them with a deeper understanding of how AI technologies process and generate human language. Their perspectives can contribute nuanced insights into the limitations and capabilities of AI tools from a theoretical standpoint, further enriching the study's findings.

The remaining respondents (less than 10% combined) came from a variety of non-language-related disciplines, unspecified majors. While these fields are not directly tied to language or translation studies, the inclusion of students from diverse academic backgrounds reflects a growing curiosity about the role of AI in communication and language learning more broadly. These students might engage with AI tools for general educational support or language improvement, especially in the context of globalized professional environments.

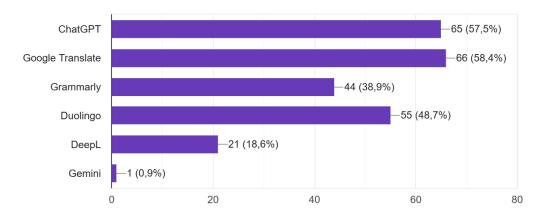
Overall, the distribution of majors among respondents highlights a strong concentration of students in language-focused disciplines, particularly English Language and Translation, who are well-positioned to provide relevant and informed feedback on the use of AI tools in language learning and translation practice. This demographic makeup reinforces the validity and focus of the study, ensuring that its conclusions are grounded in the experiences of those most directly impacted by AI in language education.

4.1.2. Awareness and Usage of AI Tools

3. Have you ever used Al-based learning tools (e.g., Al chatbots, translation software, etc.) to improve your English skills? Bạn đã từng sử dụng c....v.) để cải thiện kỹ năng tiếng Anh của mình chưa? 113 câu trả lời



4. Which of the following AI-based learning tools have you used for learning English? (Select all that apply) Bạn đã sử dụng công cụ học tập dựa trên tr... Anh? (Chọn tất cả những công cụ bạn đã sử dụng) 113 câu trả lời



An overwhelming 94.7% of respondents reported having used AI-based learning tools—such as ChatGPT, Google Translate, Grammarly, Duolingo, and others—to improve their English skills. This near-universal adoption reflects the increasing normalization of artificial intelligence in the educational landscape, particularly in language learning contexts. It is evident that the majority of students are not only aware of these tools but are actively incorporating them into their academic routines. Such a high rate of usage demonstrates that AI tools have become an integral part of how learners approach English language acquisition,

especially in higher education environments where students often seek efficient, flexible, and autonomous learning methods.

Among the tools mentioned, Google Translate (58.4%) and ChatGPT (57.5%) emerged as the most widely used, with more than half of all respondents selecting them. The popularity of Google Translate can be attributed to its long-standing presence, ease of access, and utility in quick text translation across multiple languages, which makes it especially useful for understanding vocabulary and sentence structures. ChatGPT, on the other hand, offers a more interactive experience, allowing students to engage in simulated conversations, ask for language explanations, generate written content, and even receive feedback on grammar and usage. The versatility of ChatGPT positions it not only as a translation or writing tool but also as a dynamic language practice assistant.

Duolingo, used by 48.7% of respondents, continues to be a popular platform for reinforcing foundational skills such as vocabulary, basic grammar, and listening comprehension through gamified learning. Its structured approach and user-friendly interface likely appeal to learners seeking consistent daily practice in a low-pressure environment. Grammarly, selected by 38.9% of students, plays a distinct but equally important role in academic writing and communication. Its real-time feedback on grammar, punctuation, tone, and style supports students in refining their written output, which is critical for assignments, presentations, and professional communication.

Less commonly used but still notable are DeepL (18.6%) and Gemini (0.9%). DeepL's reputation for producing high-quality, context-aware translations may appeal to more advanced users who require nuanced translation capabilities. Meanwhile, the low usage rate of Gemini could suggest that it is either less familiar to students or not yet well-integrated into academic workflows.

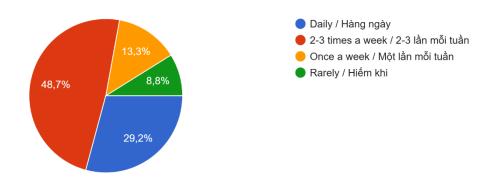
This extensive integration of AI in learning practices—especially among English Language and Translation majors—demonstrates that such tools are not viewed as mere novelties but as reliable and effective supplements to formal instruction.

They enhance learners' autonomy, address individual learning needs, and facilitate access to immediate feedback, all of which contribute to improved learning outcomes and greater engagement in language acquisition.

4.1.3. Frequency and Patterns of Use

5. How often do you use Al-based tools to improve your English? Bạn sử dụng công cụ học tập dựa trên trí tuệ nhân tạo để cải thiện tiếng Anh của mình bao nhiều lần mỗi tuần?

113 câu trả lời



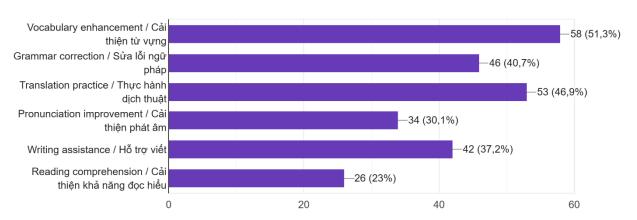
The survey results reveal that AI-based learning tools have become a routine part of many students' English learning journeys. A notable 29.2% of participants reported using AI tools daily, indicating a deep level of integration into their everyday study habits. This frequent usage suggests that for nearly one-third of the surveyed students, AI is not just a supplementary resource but a central element in their language acquisition process—used perhaps for checking grammar, translating texts, practicing vocabulary, or receiving immediate feedback.

An even larger portion of students (48.7%) reported using AI tools 2 to 3 times a week. While this group may not depend on these tools daily, they still demonstrate consistent engagement, pointing to a sustained recognition of AI tools' value in supporting learning over time. This pattern may reflect how students strategically incorporate AI assistance when working on assignments, preparing for exams, or reinforcing specific skills during their self-study sessions.

Smaller percentages of students reported less frequent use: 13.3% use AI tools only once a week, and 8.8% said they rarely or almost never use them. This latter group may represent learners who are either more reliant on traditional learning methods, find limited personal relevance in AI tools, or may face challenges such as unfamiliarity with the technology or limited access.

4.1.4. Specific Learning Applications of AI Tools

6. What specific purposes do you use Al-based tools for in your English learning process? (Select all that apply) Bạn sử dụng công cụ học tập dựa trên ...ng Anh? (Chọn tất cả những mục đích bạn sử dụng) 113 câu trả lời



AI tools are being employed across a broad spectrum of language learning functions, demonstrating their versatility and multifunctionality. The most frequently reported use was for vocabulary enhancement, with 58 students (51.3%) selecting this purpose. This result underscores the centrality of vocabulary acquisition in mastering a foreign language and shows that many students turn to AI-powered tools like Duolingo, ChatGPT, or Google Translate to expand and reinforce their word bank.

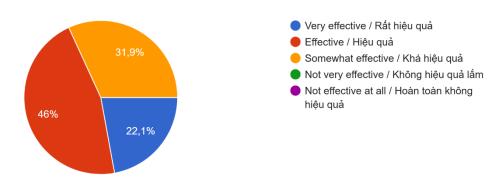
Grammar correction was the next most common application, selected by 46 students (40.7%). This reflects a significant demand for real-time language accuracy and syntactic clarity—areas in which tools like Grammarly or ChatGPT offer immediate, actionable feedback. Similarly, translation practice was reported by 53 students (46.9%) emphasizing that even students not formally studying

translation recognize the utility of tools such as Google Translate and DeepL in understanding complex texts and cross-linguistic meaning.

Other notable areas include pronunciation improvement (30.1%), which may involve using AI tools with speech recognition or audio feedback features; writing assistance (37.2%), which is crucial for essay writing and formal communication; and reading comprehension support (23%), which might include the simplification or summarization of difficult texts using AI systems. These responses show that students are leveraging AI not just for passive learning, but also for active production and deeper understanding of language components.

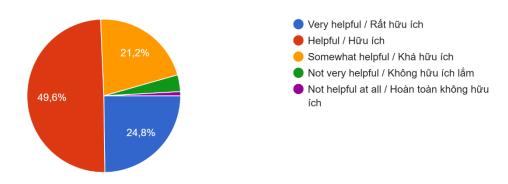
4.1.5. Perceived Effectiveness and Usefulness of AI Tools

7. In your opinion, how effective are Al-based tools in enhancing your English language skills? Theo ý kiến của bạn, công cụ học tập dựa trên trí tuệ n...ong việc nâng cao kỹ năng tiếng Anh của bạn không?



The perceived impact of AI tools on English language learning is predominantly positive. When asked about effectiveness, 22.1% of respondents rated AI tools as "very effective," and 46% considered them "effective"—a combined 68.1% who believe AI makes a meaningful contribution to their language improvement. This perception aligns with the high frequency of use and diverse range of applications already discussed, reinforcing the idea that AI is not only present in students' learning routines but is also appreciated for its educational value.

8. How helpful have AI-based tools been in improving your English skills? Công cụ học tập dựa trên trí tuệ nhân tạo đã giúp ích như thế nào trong việc cải thiện kỹ năng tiếng Anh của bạn?



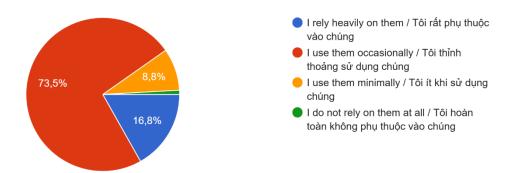
In terms of usefulness, an even larger portion—74.4%—found AI tools to be either "helpful" or "very helpful." This consensus suggests that beyond measurable learning outcomes, students feel supported and empowered when using AI, perhaps due to its immediacy, convenience, and personalized responses.

Nevertheless, a portion of students expressed reservations. About 21.2% found AI tools only "slightly helpful," and 5.3% said they were "not helpful at all." These responses indicate that AI tools do not meet the needs of all learners equally. Possible explanations may include issues such as inaccurate outputs, lack of context sensitivity (especially in complex translations or nuanced writing), or tools not aligning with specific learning preferences. These results highlight the importance of critical engagement with technology—students benefit most when they understand how and when to use AI tools effectively rather than relying on them indiscriminately.

4.1.6. Dependency and Attitudes Toward AI Integration

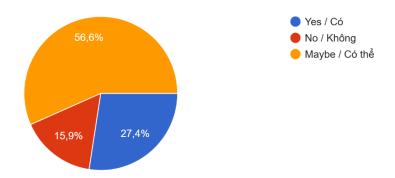
9. To what extent do you rely on Al-based tools for your English learning? Bạn phụ thuộc vào công cụ học tập dựa trên trí tuệ nhân tạo như thế nào trong việc học tiếng Anh?

113 câu trả lời



The integration of AI tools into English learning practices has generally been approached with caution and balance by students. According to the survey results, a majority of respondents—73.5%—reported that they use AI tools with moderate reliance, meaning they incorporate them as supportive aids without depending on them entirely. This group likely views AI as a complement to traditional learning strategies, turning to it for quick feedback, practice, or revision but continuing to rely on textbooks, human feedback, and classroom instruction for core learning. Only 8.8% of participants indicated heavy dependence on AI tools, suggesting that a relatively small portion of students may be integrating AI into most aspects of their language studies, perhaps due to their confidence in technology or the personalized support AI can provide. On the other hand, 16.8% said they use AI occasionally, implying that for these students, AI is not yet a critical part of their learning routine, possibly due to preference for traditional methods, limited exposure, or lack of access.

10. Do you believe that Al-based tools can eventually replace traditional methods of learning English? Bạn có nghĩ rằng công cụ học tập dựa trên...học tiếng Anh truyền thống trong tương lai không?



The findings from the data suggest that, although artificial intelligence (AI) is progressively becoming an influential force in the domain of English language education, it has not yet achieved a level of acceptance sufficient to supplant traditional pedagogical approaches. A notable proportion of respondents, specifically 56.6%, expressed ambivalence regarding the potential for AI to entirely replace conventional methods of language instruction, with the majority opting for a response of "Maybe." This reflects a prevailing sense of uncertainty, underlining students' cautious stance toward AI's capacity to fulfill the intricate, multifactorial demands inherent in language learning. The acquisition of language is uniquely dependent on the rich, context-driven interactions between learners and instructors, which involve not only cognitive engagement but also emotional intelligence, cultural sensitivity, and adaptive feedback. These facets are not easily replicated by AI-driven tools, thus raising significant questions about the capacity of AI to mirror the depth of personalized, human-centric teaching in the field of language education.

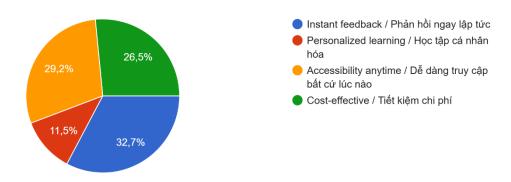
Furthermore, only 27.4% of the students expressed confidence in the feasibility of AI entirely replacing traditional English learning methods, indicating that while a segment of the student population acknowledges AI's potential as a supplementary tool, they remain circumspect about its ability to fully replace the dynamic, interactive processes involved in human-led instruction. Conversely,

15.9% of the respondents explicitly disagreed with the notion that AI could supplant traditional educational methods, underscoring a clear preference for the pedagogical richness offered by human educators. These statistics collectively suggest that, despite the increasing integration of AI technologies into educational settings, the majority of students continue to perceive AI as an auxiliary tool rather than a definitive substitute for conventional learning strategies.

This data aligns with broader scholarly discourse on the limitations and challenges of incorporating AI into education, particularly in disciplines such as language acquisition, where the human dimension of learning plays a crucial role. In light of these findings, it becomes evident that while AI holds considerable promise in enhancing specific aspects of language learning, its role remains supplementary to, rather than a replacement for, the nuanced, culturally informed, and adaptive educational experiences that human instructors provide. Therefore, the integration of AI into language education must be approached with a balanced perspective that recognizes the irreplaceable value of human interaction in the teaching-learning process.

4.1.7. Perceived Benefits and Challenges

11. What do you consider to be the most significant advantage of using Al-based tools for learning English? Theo bạn, lợi thế lớn nhất của việc sử dụng...rên trí tuệ nhân tạo trong việc học tiếng Anh là gì? 113 câu trả lời



The perceived benefits of AI-based tools are clearly recognized by students, with several key features emerging as the most impactful in enhancing their English learning experience. Instant feedback was cited by 32.7% of respondents as the

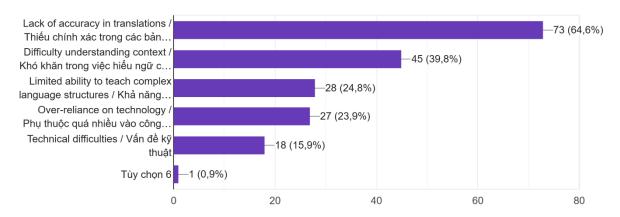
most significant advantage, demonstrating the value of receiving immediate corrections and suggestions during learning tasks. This allows students to spot and fix errors in real time, leading to quicker comprehension and retention of correct language usage. In traditional settings, feedback is often delayed until an instructor reviews and returns work. The rapid responses provided by AI, especially in grammar correction or vocabulary enhancement, can dramatically speed up the learning process and foster independent revision habits. Additionally, 11.5% of students appreciated personalized learning, in which AI tools adapt to individual strengths and weaknesses. These tools often offer tailored content recommendations, quizzes, and feedback that align with each student's proficiency level and learning style, helping them focus on areas of improvement without unnecessary repetition.

Another 29.2% of students found the accessibility of AI tools to be a major benefit. Unlike classroom-based resources, AI tools can often be accessed 24/7 via smartphones, laptops, or tablets, making them particularly useful for students with irregular schedules or those studying in remote locations. The flexibility to practice at any time and place gives learners more control over their learning pace and environment, thereby promoting autonomy. However, despite these advantages, students also encountered notable challenges when using AI tools. The most frequently reported issue was inaccurate translations, with 64.6% of participants citing this limitation. AI-powered translation engines often struggle with idioms, colloquialisms, and nuanced meanings, leading to translations that may be grammatically correct but semantically flawed. For students focusing on translation and interpreting, this is a critical shortfall that could impede skill development if not cross-checked with human input.

Additionally, 39.8% of students pointed out the difficulty AI tools have in understanding context, particularly in tasks involving figurative language or culturally specific expressions. Such shortcomings limit the effectiveness of AI in providing meaningful feedback or guidance on more complex texts. Concerns

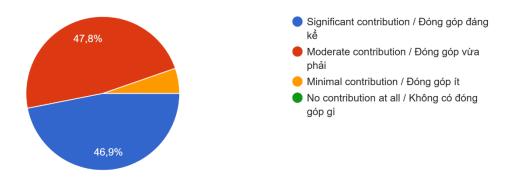
about over-reliance on AI tools were also raised by 23.9% of participants, who feared that consistent dependence on AI might weaken their own critical thinking and language processing abilities. This group may worry that, instead of internalizing rules and concepts, learners might become passive recipients of AI suggestions. Furthermore, 15.9% of students mentioned facing technical difficulties, such as interface bugs, slow responses, or compatibility issues. These technical obstacles, while less frequent, can significantly disrupt the learning flow and cause frustration, especially when students are working under time constraints or with limited technical skills

12. What challenges or limitations have you encountered when using AI-based tools for learning English? (Select all that apply) Bạn đã gặp phải th...g Anh? (Chọn tất cả những thách thức bạn gặp phải) 113 câu trả lời



4.1.8. Impact on Translation and Language Learning Outcomes

14. To what extent do you believe Al-based tools have contributed to your overall English proficiency? Bạn nghĩ công cụ học tập dựa trên trí...ư thế nào vào khả năng tiếng Anh tổng thể của bạn?

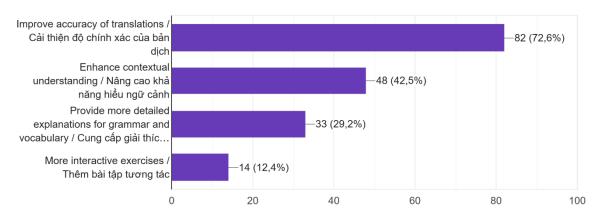


When assessing the impact of AI tools on English language proficiency, the results reveal a generally favorable outcome among students. A substantial 94.7% of respondents reported some form of improvement in their language skills as a result of using AI tools. Specifically, 46.9% indicated experiencing significant improvement, while 47.8% noted a moderate enhancement in their abilities. Only 5.3% of participants reported little to no change, underscoring a widespread belief in the efficacy of AI-assisted learning in fostering language development. This notable enhancement in language skills can likely be attributed to several key factors, including the provision of real-time feedback, the availability of diverse and dynamic practice activities, and the opportunity for individualized learning pathways. These elements collectively allow students to engage with the English language in a more interactive and personalized manner, thereby facilitating a deeper and more comprehensive understanding of the language.

Furthermore, the positive outcomes were not confined to general language proficiency but were especially pronounced in the area of translation—a skill of particular relevance to students enrolled in specialized programs such as Translation and Interpreting or Teaching English to Speakers of Other Languages (TESOL). The significant improvement noted in translation skills highlights the potential of AI tools to address specific, high-level competencies that are central to these academic disciplines. This finding suggests that AI tools are not only effective in enhancing general language skills but also in supporting the acquisition of specialized, discipline-specific knowledge, thus demonstrating the broad applicability and versatility of AI in language education.

4.1.9. Future Prospects and Student Recommendations

13. Based on your experience, how do you think AI-based tools can be improved to better support English learning? Dựa trên kinh nghiệm của bạn, bạ... như thế nào để hỗ trợ việc học tiếng Anh tốt hơn? 113 câu trả lời



When surveyed about areas in English language learning that could be enhanced through AI tools, students identified several key domains for improvement. A significant majority (72.6%) emphasized the need for more accurate translations. This highlights the importance of precise and context-sensitive translation tools, as students often rely on translations to bridge gaps in comprehension and expression. The high demand in this area points to the limitations of current AI systems in handling linguistic nuance, suggesting that improvements here could greatly enhance learners' understanding and confidence.

Following this, 42.5% of respondents identified contextual understanding as a crucial area for AI development. Mastery of a language requires more than grammatical correctness; it also involves recognizing the cultural, social, and situational contexts that influence meaning. Students' responses indicate a strong desire for AI tools that can interpret and convey these subtleties, reinforcing the need for systems that go beyond surface-level language processing.

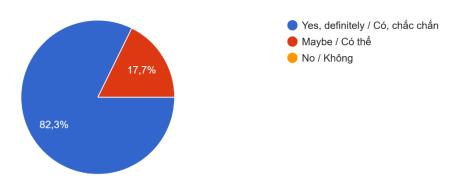
In addition, 29.2% of students expressed interest in more comprehensive explanations of grammar and vocabulary. This reflects common difficulties faced by learners in grasping complex rules and the nuanced use of words across different contexts. More detailed and context-aware explanations would help

clarify these aspects, facilitating deeper comprehension and better application of language skills.

Lastly, 12.4% of participants highlighted a preference for more interactive exercises. This suggests that engagement and active learning are essential components of effective language acquisition. Features such as quizzes, games, or real-world scenarios could provide immediate feedback and reinforce learning, making the process more dynamic and responsive to individual needs.

Taken together, the findings reveal that while AI is already a valuable tool in language education, students see substantial potential for further refinement. Key areas for development include translation accuracy, contextual understanding, grammar and vocabulary instruction, and interactive practice. Addressing these priorities could lead to more personalized, effective, and engaging AI-assisted language learning experiences.

15. Would you recommend Al-based learning tools to other students who are learning English? Bạn có đề xuất công cụ học tập dựa trên trí tuệ nhân tạo cho các sinh viên khác đang học tiếng Anh không?



Looking ahead, students expressed strong support for AI-based learning tools. According to the survey, 82.3% would recommend these tools to others, reflecting high satisfaction and recognition of their value in language learning. This suggests students view AI not just as a personal resource but as a broadly beneficial educational aid. Despite current limitations, the tools' accessibility, practicality, and impact on learning outcomes make them appealing for wider adoption.

In summary, AI tools are increasingly seen as valuable supplements to traditional language instruction. They offer benefits such as instant feedback, adaptive content, and flexible learning opportunities. Students reported notable improvements in areas like translation accuracy and contextual understanding. However, challenges—including occasional mistranslations and limited contextual nuance—underscore the need for continued development and better integration into teaching practices. As digital literacy grows and technology evolves, AI is likely to play a more prominent role in English language education, provided it continues to adapt to learners' needs.

4.2. Data Analysis

The findings from this study clearly highlight the growing integration of AI-driven educational tools within the English learning experiences of third-year English majors, particularly those focused on translation. This section aims to interpret the results in relation to key concepts in language acquisition theories, learner autonomy, and the pedagogical implications for translation studies. The data not only reveals the practical use of AI tools but also sheds light on the broader implications of their use in shaping future language education practices.

4.2.1. The Role of AI in Enhancing Autonomous Learning

A major takeaway from the data is the significant preference for using AI tools like ChatGPT, Google Translate, and Grammarly, particularly among students who report using them independently and on a regular basis. This aligns strongly with the concept of learner autonomy, a fundamental idea in language education that emphasizes students' ability to take control of their own learning (Holec, 1981). The role of AI in this context is pivotal, as it empowers students by providing instant feedback, personalized responses, and on-demand language support that can be accessed anytime and anywhere. In essence, AI tools give students the freedom to shape their own learning experiences, which supports the idea of self-directed learning—an approach that Little (1991) sees as essential for

developing higher-level language proficiency, particularly in the context of professional skills like translation.

The availability of these tools encourages students to take more responsibility for their learning, moving away from the traditional teacher-centered classroom. As such, AI tools help students build a more independent learning routine. The high frequency of use, as observed in the study, is indicative of how these tools have become embedded in students' everyday study habits. This reflects a broader shift in educational environments, where the responsibility for learning is increasingly shared between the teacher and the student, with AI serving as an accessible facilitator of language development. It can be argued that this shift towards autonomy, supported by AI tools, is particularly important in translation studies, where students must develop critical thinking and problem-solving skills to tackle complex translation tasks.

4.2.2. AI as a Supplement, Not a Substitute

While AI tools are widely appreciated by students for their benefits, the data also reveals a more cautious stance regarding their ability to replace traditional instructional methods. This concern resonates with Vygotsky's (1978) concept of the Zone of Proximal Development (ZPD), which underscores the importance of human guidance and scaffolding in learning. While AI tools can provide quick answers and serve as aids for practice, they are not capable of offering the nuanced feedback, cultural context, and deep, interactive engagement that human teachers provide. In translation tasks, for instance, AI tools often struggle with the subtleties of meaning, idiomatic expressions, or rhetorical devices, which require a deeper understanding of language and context—skills that human instructors are better equipped to teach.

Students' concerns about the inaccuracy of translations, difficulty in grasping context, and the presence of technical glitches further emphasize this limitation. These challenges reflect the fact that while AI tools can be incredibly useful for providing basic translation or helping students understand general language rules,

they lack the ability to engage with language at the deeper levels that are necessary for professional-level translation work. This suggests that AI tools should be seen as valuable assistive tools rather than replacements for human interaction and traditional pedagogical approaches. Thus, while AI can facilitate language learning, it is not a complete substitute for the expertise and personalized feedback that human teachers offer, particularly in translation education where context and style are paramount.

4.2.3. Implications for Translation Training

For translation students, the use of AI tools presents both opportunities and pedagogical challenges. On the positive side, tools like Google Translate and ChatGPT can help students generate rough drafts, explore alternative phrasings, and clarify unfamiliar vocabulary, all of which are essential activities in the pretranslation and post-editing stages of professional translation. These tools provide students with a valuable first step in the translation process, offering them a starting point for further refinement and improvement. In this way, AI tools align with the real-world needs of translators, helping them improve productivity and providing a digital assistant for repetitive tasks.

However, there is a potential danger in over-relying on these tools. While they can assist students in completing their work more efficiently, they may simultaneously hinder the development of more critical competencies. These include stylistic adaptation, where students learn to adjust tone and language to suit the target audience, as well as audience awareness—a critical skill in translation that requires a nuanced understanding of how language functions in different cultural and social contexts. These areas of competence require the student to engage deeply with the language, and excessive reliance on AI tools could prevent them from developing these skills fully.

Moreover, the study's results suggest that AI tools should be used critically rather than passively. Digital literacy has thus become a crucial component of translator education, with students needing to understand not just how to use these tools, but

also how to critically evaluate the AI-generated output, identify flaws, and make informed linguistic choices. This insight calls for the inclusion of machine translation post-editing (MTPE) as a core element of translation curricula. MTPE involves editing machine-generated translations to ensure they meet the required standards of accuracy, fluency, and appropriateness, and it can be a valuable skill for students to master in the digital age.

4.2.4. AI Tools and Motivation

The frequency of use and overall student satisfaction with AI tools also reflect a motivational dimension in language learning. According to Self-Determination Theory (Deci & Ryan, 1985), intrinsic motivation flourishes when learners feel a sense of competence and autonomy over their learning process. The ability to receive instant feedback on translations or grammar corrections may foster a sense of progress, enhancing students' confidence and satisfaction with their learning journey. This likely explains why such a large portion of students reported that AI tools contributed significantly to their language development and why many recommended these tools to their peers.

However, a cautionary note emerges from the data: while AI tools may foster motivation in some contexts, they could also undermine deeper engagement with language learning. If students become overly dependent on AI for quick answers, this could lead to more surface-level learning rather than meaningful, reflective engagement with linguistic problems. Such dependence may discourage students from grappling with complex language issues on their own, which is a critical part of mastering translation and language acquisition in general. Therefore, educators must carefully manage the use of AI tools in a way that maintains motivational balance—encouraging the use of AI for support without allowing it to replace deeper cognitive engagement with the material.

4.3. Discussion

4.3.1. Problems When Using AI in Translation

The emergence of artificial intelligence in the field of translation has redefined traditional practices and introduced new pedagogical and professional dynamics. While AI-driven tools such as machine translation engines and large language models have enhanced accessibility and efficiency, their use also presents a complex array of challenges, especially in educational contexts. For third-year English majors—many of whom are still consolidating their linguistic and critical competencies—these challenges are not merely technical but also cognitive, evaluative, and ethical in nature. This section discusses two key problem areas: the difficulty of evaluating the quality and trustworthiness of AI-generated translation output, and the increasing challenge of distinguishing between human and AI authorship.

4.3.1.1. Challenges in Evaluating AI Translation Output

One of the most pressing problems in the use of AI for translation is the evaluation of the results it produces. AI systems, particularly those based on deep learning and neural networks, operate by predicting word sequences based on statistical patterns found in massive multilingual corpora. While this allows for relatively accurate sentence formation, it does not guarantee fidelity to the source text, nor does it ensure the communicative intent, tone, or cultural subtleties are preserved. As a result, the surface-level fluency of AI output can mask deeper semantic inaccuracies. This phenomenon—sometimes termed "illusion of correctness"—poses a particular risk in educational settings, where students may lack the experience needed to detect nuanced errors.

From an academic standpoint, translation is not simply a matter of linguistic transposition but a complex cognitive task involving interpretation, negotiation of meaning, and cultural adaptation. When students use AI-generated translations without critically engaging with the text, they bypass this cognitive process. This raises serious concerns about the effectiveness of translation education when

students rely too heavily on machine outputs that have not been meaningfully evaluated or understood. For instance, AI might produce grammatically sound but semantically incorrect sentences, especially when dealing with idiomatic expressions, context-dependent phrases, or culturally bound references. Without sufficient training in evaluation strategies, students are unlikely to identify these shortcomings, leading to the propagation of flawed translations and the erosion of linguistic competence.

Furthermore, most AI systems do not provide insight into their decision-making processes. The so-called "black box" nature of neural networks complicates the ability of users to assess why a particular translation was made or whether it is valid. Unlike human translators, who can explain their lexical choices or syntactic strategies, AI systems offer no interpretative framework. This opacity undermines transparency and prevents students from developing a reflective understanding of the translation process—a core objective in translation pedagogy.

4.3.1.2. Distinguishing Human Translation from AI Output

Another growing concern is the difficulty of distinguishing between humangenerated translations and those produced by AI systems. As AI-generated texts become increasingly sophisticated, their outputs often mimic the fluency and structure of human writing. This presents several academic and ethical dilemmas, particularly in evaluating student work and maintaining standards of academic integrity.

There are, however, still subtle markers that can sometimes differentiate AI from human-authored translations. AI-generated translations tend to display certain characteristics such as uniform sentence patterns, generic vocabulary, limited rhetorical variation, and a lack of emotional or cultural nuance. Human translations, by contrast, often exhibit deliberate stylistic variation, creativity, and a sensitivity to the intended audience and communicative context. Nonetheless, these distinctions are not always clear-cut, especially when students revise or postedit AI-generated drafts to obscure the source of the text. This blurring of

authorship raises questions about originality, authorship, and the nature of learning in a digital era.

From an institutional perspective, the difficulty in detecting AI-generated content challenges traditional assessment methods. If students are using AI tools to complete assignments but presenting the results as their own unaided work, educators face difficulties in accurately assessing individual learning outcomes. This has broader implications for curriculum design, grading fairness, and the development of reliable evaluation criteria. It also necessitates the introduction of new pedagogical strategies that both acknowledge the presence of AI tools and guide students in using them ethically and reflectively.

4.3.1.3. Over-Reliance and Cognitive Passivity

Beyond the technical and evaluative concerns, the growing dependency on AI in translation tasks may foster cognitive passivity among learners. When students turn to AI tools as default solutions—rather than as aids or supplements—they risk outsourcing the essential intellectual labor of translation. Translation is a cognitively demanding activity that engages memory, inference, problem-solving, and creativity. By relying excessively on AI, students may fail to develop these core competencies, resulting in superficial engagement with language learning.

This concern is supported by educational research on digital learning tools, which suggests that passive use of automation often leads to reduced retention, limited critical thinking, and a false sense of mastery (Selwyn, 2016). In translation education, where deep engagement with textual meaning, context, and linguistic choice is essential, this can be particularly detrimental. Students may become efficient at producing text, but less skilled in understanding the why and how of translation choices—a gap that AI tools do not bridge.

Moreover, as AI systems do not currently simulate the cognitive processes involved in human translation—such as intention analysis, inferencing, or negotiating ambiguity—they cannot model the complex reasoning strategies that students need to develop. Therefore, while AI tools may assist with routine

translation tasks, they cannot replace the reflective, analytical, and interpretative skills that professional translation demands. This reinforces the need for guided instruction that helps students critically assess AI outputs, understand their limitations, and use them responsibly within the framework of their learning goals.

4.3.2. Can AI-Generated Translations Meet Human-Level Quality Standards?

As AI tools become increasingly integrated into translation workflows, a central question emerges: can the results produced by AI match the expectations traditionally reserved for human translation? This question becomes especially relevant in educational settings, where the quality of translation output is evaluated not only by its correctness but also by its relevance, fluency, and originality. In this section, three key criteria are used to assess the extent to which AI-generated translations fulfill human-level expectations: the ability to personalize content, smooth and natural writing ability, and the risks associated with plagiarism or lack of originality.

4.3.2.1. Personalization in AI-Generated Translations

Personalization in translation refers to the translator's ability to adapt content to suit specific audiences, purposes, and cultural expectations. This includes adjusting tone, vocabulary, formality level, and even stylistic elements depending on the communicative context. Human translators excel in this area because they are capable of interpreting not just the literal meaning of the text, but the intent, social setting, and emotional tone behind it. They can also integrate personal, cultural, or institutional preferences—something particularly relevant in marketing, literary, and academic translations.

AI tools, however, face clear limitations when it comes to achieving meaningful personalization. While many AI-driven platforms (such as ChatGPT or DeepL) offer basic customization features—such as formal vs. informal tone or British vs. American English—their personalization capabilities remain shallow. These tools can mimic certain surface-level stylistic preferences, but they lack the deeper contextual awareness and pragmatic sensitivity that humans use to shape language

choices. For example, when translating a persuasive speech or a culturally rich literary passage, an AI may choose words that are technically correct but emotionally flat or culturally inappropriate.

Additionally, AI does not yet possess the metacognitive skills required to analyze audience needs or adapt based on feedback in real time. Human translators can assess the effectiveness of their tone, revise based on client or reader reactions, and reframe their language accordingly. In contrast, AI outputs remain static unless specifically re-prompted, and even then, they cannot autonomously refine their understanding of the user's intent unless guided by external input. This makes them ill-suited for contexts where personalization is critical to communicative success.

4.3.2.2. Writing Fluency and Naturalness

One of the most praised aspects of AI-generated content is its fluency. Modern AI systems produce grammatically accurate and stylistically polished sentences that often resemble native-level writing. This is especially true with neural machine translation models (e.g., Google Translate's NMT system) and large language models trained on diverse multilingual corpora. These tools generate text that is, on the surface, fluid, coherent, and well-structured.

However, the question arises: does fluency equate to quality? In many cases, fluency can be deceptive. AI tools may produce translations that "sound right" but fail to capture the depth or ambiguity of the original text. For instance, idioms, metaphors, or culturally bound expressions may be rendered literally or awkwardly, despite the output being grammatically correct. In academic translation, where precision and conceptual clarity are essential, such smooth but semantically shallow translations can undermine the reliability of the content.

Moreover, AI fluency is limited by training data. AI-generated texts often reflect the dominant linguistic patterns of their training sets, resulting in outputs that lack variation or creativity. Unlike human translators who deliberately choose sentence structures for rhetorical impact or narrative rhythm, AI-generated language tends to follow predictable and formulaic patterns. This can lead to stylistic monotony, making the translation feel mechanical or generic. In contrast, skilled human translators can adjust sentence length, play with syntactic variation, and adapt tone dynamically to create a more engaging and contextually appropriate text.

In pedagogical contexts, this overemphasis on fluency may also mislead students. Learners may assume that a translation is correct because it reads smoothly, without critically comparing it to the source or considering its appropriateness in context. This highlights the importance of teaching students to differentiate between surface fluency and deeper textual adequacy—something AI tools, despite their linguistic polish, cannot yet ensure independently.

4.3.2.3. Plagiarism and Originality Concerns

Plagiarism represents a particularly complex issue in the use of AI-generated translations. While AI models do not explicitly copy content from specific texts, they are trained on vast datasets, some of which may contain copyrighted materials. This raises concerns about the potential for AI to unintentionally reproduce patterns or phrases that are too close to existing works, thereby violating standards of academic originality.

In translation assignments, where authenticity and critical engagement with the source material are valued, relying entirely on AI-generated output may be viewed as a form of academic dishonesty—especially if students submit such work without disclosure. The challenge is that many AI tools operate as "black boxes," and students may not fully understand the extent to which the outputs are derivative. This lack of transparency makes it difficult to evaluate authorship and originality, particularly in educational institutions where clear standards for plagiarism are enforced.

Furthermore, even when the AI-generated translation is technically unique, it may still lack intellectual originality. Translation is not merely the reproduction of information but the application of critical judgment, interpretation, and cultural mediation. When students rely on AI to produce translations without reflection or

reworking, the result may be formally original but intellectually passive. This undermines both the pedagogical goals of translation training and the integrity of academic work.

To mitigate these risks, educational settings must establish clear guidelines on the acceptable use of AI in translation assignments. Encouraging students to disclose AI use, reflect on its limitations, and compare machine outputs with their own interpretations can promote a more responsible and educative approach. Institutions may also need to integrate AI-literate assessment frameworks that focus not only on the final product but on the translation process itself—including decision-making, revision, and justification.

4.3.3. Practical Solutions to Integrating AI into the Translation Learning Process

As third-year English majors approach their final stages of academic study, integrating AI-driven educational tools into their translation process offers a unique opportunity to enhance their linguistic skills, bridge the gap between academic theory and professional practice, and develop the competencies needed for the translation industry. This section discusses practical strategies for third-year students to effectively incorporate AI tools into their learning and development, as well as how these tools can prepare them for professional translation careers.

4.3.3.1 Personalizing AI tools

One practical solution to support student learning is the personalized use of AI tools such as ChatGPT. This tool allows learners to receive tailored responses based on their academic level, learning style, and specific needs. When used effectively, it can enhance learner autonomy and improve engagement with course content. The following section outlines simple steps to apply ChatGPT in a personalized and strategic manner.

Practical Applications:

ChatGPT can assist in:

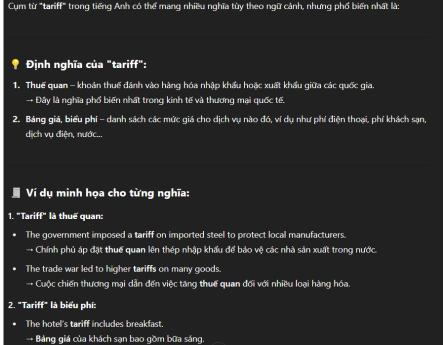
- Summarizing long academic articles.
- Suggesting academic references across disciplines.
- Explaining complex concepts at various levels (beginner to advanced).
- Comparing theories and academic viewpoints.

Illustrative Example:

- User's query: "Compare behaviorism and cognitivism in education."
- Response from ChatGPT:

Behaviorism emphasizes the role of the environment and reinforcement in learning behavior, while cognitivism focuses on mental processes such as information processing, memory, and reasoning...





Why This Is Effective:

Using ChatGPT as a personal knowledge base significantly reduces time spent on information retrieval, especially during the intensive research phases of a thesis. Unlike static search engines, ChatGPT provides contextual and synthesized answers, which help users absorb and apply knowledge more efficiently.

4.3.3.2 Building up Vocabulary by Using AI

A common challenge in academic writing is the accurate use of technical and discipline-specific vocabulary. ChatGPT serves as a robust tool to **retrieve**, **explain**, **and practice terminology** across virtually all professional domains, from medicine and engineering to economics and the humanities.

Practical Applications:

- Clarifying context-specific meanings (e.g., "resistance" in physics vs. medicine).
- Suggesting synonyms and antonyms in academic language.
- Demonstrating word usage in scholarly contexts.
- Generating vocabulary lists tailored to specific topics or research fields.

Illustrative Example:

- User's query: "Provide a list of financial vocabulary related to risk management."
- Response from ChatGPT:
- 1. Risk exposure
- 2. Hedging
- 3. Value at Risk (VaR)
- 4. Liquidity risk
- 5. Credit default swap

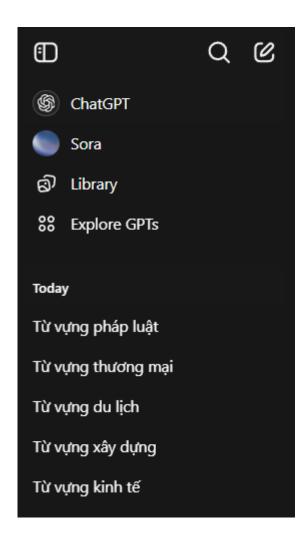
What can I help with? cho tôi những từ vưng tiếng Anh về chuyên ngành pháp luật ① Attach

Dưới đây là danh sách các **từ vựng tiếng Anh chuyên ngành pháp luật**, được phân theo các nhóm chủ đề phổ biến để bạn dễ học hơn: 💵 Từ vựng cơ bản ngành luật (General Legal Terms) Tiếng Anh Tiếng Việt Law Luật Pháp lý Legal Lawyer / Attorney Luật sư Judge Thẩm phán Court Tòa án Trial Phiên tòa

॒ Các loại luật (Types of Law)	
Tiếng Anh	Tiếng Việt
Civil law	Luật dân sự
Criminal law	Luật hình sự
Constitutional law	Luật hiến pháp
Administrative law	Luật hành chính
Corporate law	Luật doanh nghiệp
International law	Luật quốc tế
Labor law	Luật lao động
Intellectual property law	Luật sở hữu trí tuệ

Why This Is Effective:

ChatGPT's access to extensive lexical databases and contextual modeling enables learners to adopt academic and professional vocabulary with confidence. This not only enhances the quality of writing in theses and research papers but also improves academic communication. In addition, the words you searched will be saved in case you need them in the future.



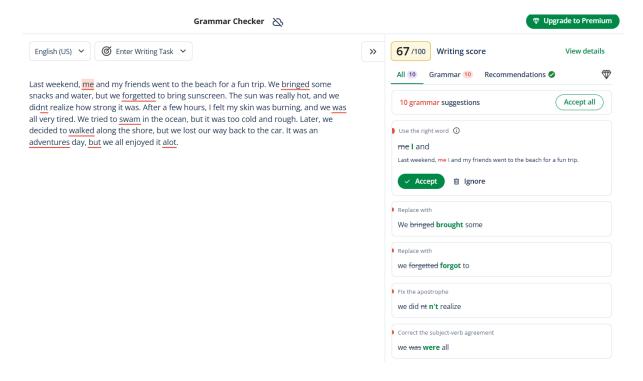
4.3.3.3 Using QuillBot to Check Grammar

Maintaining correct grammar is essential in academic writing to ensure clarity and precision. QuillBot's **grammar checking** tool automatically detects and corrects errors in various aspects of language, including syntax, verb tense, subject-verb agreement, punctuation, and spelling. This tool is particularly useful for non-native English speakers or anyone unfamiliar with academic writing conventions.

Illustrative Example:

- Error: "The technology has change the way people communicate."
- QuillBot will automatically correct it to: "The technology has changed the way people communicate."

By quickly identifying and rectifying these errors, QuillBot helps writers achieve grammatical accuracy and maintain the professionalism expected in academic work.



Why It Helps:

QuillBot's grammar checker enhances the flow and readability of academic papers, ensuring that writers can focus on content and ideas rather than worrying about technical mistakes. It is an essential tool for refining and polishing academic writing, ensuring that the final submission meets the required grammatical standards.

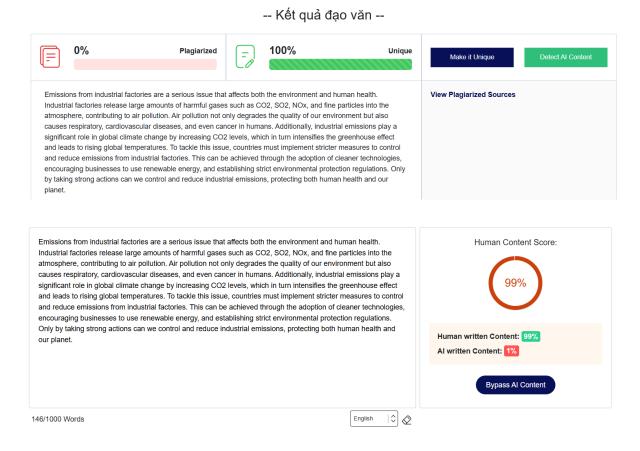
4.3.3.4 Using Rephrase as a Tool for Plagiarism and AI Content Checking

Plagiarism is a serious concern in academic research and writing. Rephrase's plagiarism and AI content prevention tool helps tackle this issue by comparing

the submitted text against an extensive database of academic sources, articles, and web content to identify any potential overlaps or similarities. This tool assists writers in preventing unintentional plagiarism by highlighting sections of the text that are too similar to existing content.

Illustrative Example:

• If a sentence or phrase closely mirrors a published source, the tool will notify the writer and suggest rephrasing to ensure originality.



Why It Helps:

The checker is a critical tool for maintaining academic integrity. It ensures that the work is free from any inadvertent duplication of existing ideas or phrases. By detecting potential similarities, Rephrase provides users with the opportunity to revise their work before submission, safeguarding against the risks of plagiarism and AI Content.

Chapter V. Conclusion

5.1. Summary of Key Findings

The findings of this research provide valuable insights into the role of Artificial Intelligence (AI) tools in enhancing the translation skills of third-year English majors. The study highlights the advantages and limitations of AI in translation education, and its potential to contribute to the development of key professional competencies. The primary findings can be categorized as follows:

AI Tools as Essential Learning Aids

Although AI tools provide helpful initial drafts, they often require refinement. By integrating AI in translation practice, students gain valuable experience in reviewing and improving translations, a skill crucial for professional work. These tools foster critical thinking as students assess and enhance the quality of their output.

Personalized Learning and Feedback

The personalized nature of AI feedback helps students target areas of improvement more effectively. This individualized support promotes self-regulated learning, empowering students to take ownership of their development and refine their translation skills in a more focused manner.

Enhanced Professional Skill Development

Exposure to professional-grade tools prepares students for the demands of the translation industry. It allows them to gain technical proficiency, develop consistency in large projects, and understand the real-world application of translation software, which are essential skills for any professional translator.

• Limitations of AI in Translation

While AI tools improve efficiency, they fall short in capturing subtle cultural contexts and idiomatic expressions. Students must recognize when human

judgment is necessary, especially when translating culturally sensitive content, ensuring that translations meet professional and ethical standards.

Ethical Considerations and Plagiarism Risks

The potential for students to misuse AI-generated translations underscores the importance of academic integrity. Educational institutions should guide students in the ethical use of AI, emphasizing that these tools should enhance, not replace, their own creative and critical thinking.

AI's Role in Enhancing Translation Pedagogy

AI tools offer a unique opportunity to scaffold learning, providing students with real-time feedback outside the classroom. By evaluating AI-generated translations, students deepen their understanding of translation theory and develop a more reflective approach to their work. This creates a more interactive and student-centered learning environment.

5.2. Implications for Teaching and Learning

The findings of this study highlight the role of AI-driven tools in shaping translation education. AI tools present both opportunities and challenges for translation curricula, impacting pedagogy, student engagement, and skill development. These tools can enhance student-centered learning, integrate professional tools into the curriculum, balance technology with critical thinking, address ethical concerns, and shift the role of instructors.

5.2.1. Enhancing Student-Centered Learning

AI-powered tools, such as Google Translate and DeepL, can significantly promote a student-centered learning approach. By offering personalized feedback and real-time suggestions, these tools enable students to take control of their learning experience, experimenting with various translation options and refining their skills autonomously. AI tools foster self-regulated learning, allowing students to track progress, identify recurring issues, and work at their own pace. This approach encourages active engagement, critical thinking, and deep interaction

with learning materials, aligning with the growing emphasis on personalized education in modern teaching practices.

5.2.2. Balancing Technology with Critical Thinking

While AI tools offer efficiency and convenience, it is essential to strike a balance between leveraging technology and cultivating critical thinking skills. The study underscores the limitations of AI-generated translations, particularly in capturing cultural nuances, idiomatic expressions, and context-specific meanings. Educators must therefore emphasize the importance of post-editing, where students refine AI-generated translations to meet professional standards. This process encourages students to develop essential translation skills, including error correction, problem-solving, and context-based adaptation. By promoting critical thinking, educators help students understand when to rely on AI tools and when to apply their own expertise to ensure high-quality translations.

5.2.3. Ethical Considerations and Plagiarism Risks

The use of AI tools in translation education raises important ethical concerns, particularly regarding academic integrity and plagiarism. The study highlights the risk of students over-relying on AI-generated content, potentially submitting machine-generated translations without proper modification, which may lead to unacknowledged authorship or plagiarism. To mitigate these risks, it is crucial for educators to incorporate lessons on academic integrity, responsible AI use, and the importance of originality in student work. By fostering ethical awareness, educators can guide students in using AI tools as a supplement to their learning, rather than a substitute for their own creativity and critical thinking.

5.2.4. Shifting the Role of the Instructor

The integration of AI tools into the translation curriculum calls for a shift in the traditional role of the instructor. Instead of acting solely as the provider of knowledge, instructors can adopt a more facilitative role, guiding students in the effective use of AI tools and focusing on the development of higher-order skills, such as critical analysis, reflection, and the application of translation theory. This

shift enables instructors to move beyond content delivery and engage students in reflective practices, helping them evaluate the advantages and limitations of AI tools in translation. By fostering a learning environment that encourages independent thinking and collaboration, instructors can prepare students for the evolving demands of the translation profession.

5.3. Limitations and Directions for Future Research

While this study has provided meaningful insights into the role of AI-driven educational tools in enhancing translation skills among third-year English majors, it is essential to acknowledge the inherent limitations that may influence the interpretation, scope, and applicability of the findings. Recognizing these limitations not only ensures transparency but also provides a foundation for the advancement of future research in this area.

5.3.1 Limitations of the Study

While this study provides valuable insights into the use of AI tools in translation education, several limitations must be acknowledged:

1. Sample Size and Demographic Scope

The study focused on a small, homogeneous group of third-year English majors from a single academic institution. As a result, the findings may not be generalizable to students at other academic levels or from different linguistic and cultural backgrounds. Students in earlier or later stages of their academic journey, or from diverse institutions, might engage with AI tools differently.

2. Temporal Constraints

The study's limited timeframe—conducted over a short period—restricts the ability to assess the long-term effects of AI tool usage on translation competence. Translation is a skill that develops gradually, and more extended research would be needed to evaluate how sustained use of AI tools influences students' translation skills over time.

3. Selection of AI Tools

The study primarily focused on widely used tools like Google Translate, DeepL, and Grammarly, but excluded specialized computer-assisted translation (CAT) tools such as SDL Trados, MemoQ, and other advanced neural machine translation systems. These tools, commonly used in professional settings, could provide additional insights into how AI tools impact translation workflows and cognitive processes.

4. Focus on Functional Use Over Metacognitive and Affective Responses

The study primarily examined the functional use of AI tools, with limited attention given to students' metacognitive or emotional responses. For instance, it did not explore how students' perceptions of AI tools may relate to their identity as learners or future professionals, nor how factors like motivation or anxiety affect learning outcomes.

5. Ethical Considerations

Ethical concerns related to the use of AI—such as authorship, academic integrity, and dependency—were acknowledged but not thoroughly investigated. The study did not examine institutional policies or pedagogical strategies for promoting ethical use of AI, which is an important area for future research.

These limitations suggest areas for future investigation to further enhance understanding of AI's role in translation education.

5.3.2 Directions for Future Research

To expand the scope of this study and gain a deeper understanding of AI integration in translation education, future research should explore new areas that were beyond the focus of this investigation. Interdisciplinary approaches, incorporating fields like computational linguistics, education technology, and translation studies, may provide more comprehensive insights into how AI tools can enhance learning and professional development.

Expanding the Demographic and Institutional Scope

Future studies should include a more diverse and larger sample, engaging students from different academic levels, linguistic backgrounds, and institutions. Cross-cultural and cross-institutional research would provide valuable insights into how AI tools are utilized in various settings, highlighting differences in pedagogical approaches, technological adoption, and student engagement across different contexts.

Longitudinal and Mixed-Methods Approaches

Long-term research is needed to assess the sustained impact of AI tools on translation skills. Longitudinal studies that track student performance, engagement, and skill development over multiple semesters would provide a deeper understanding of the long-term effects of AI tools. Combining this with qualitative methods, such as interviews or reflective journals, would offer a more holistic view of how AI influences cognitive, emotional, and behavioral changes in students.

Investigating Specialized and Emerging Technologies

Further research should explore the use of more specialized and advanced AI tools in translation education, including professional-grade CAT tools like SDL Trados and MemoQ, and emerging neural machine translation systems. Investigating how these tools affect cognitive load, decision-making, and quality control will help align translation curricula with real-world professional environments.

Examining Pedagogical Frameworks and Instructional Design

As AI tools become more embedded in education, research should focus on how translation instructors can effectively integrate these technologies into their teaching methods. Studies could explore instructional models that incorporate AI while still emphasizing critical thinking, creativity, and ethical responsibility. Research on training programs, workshops, and course designs would help improve how AI tools are used to foster responsible and efficient student engagement with technology.

Addressing Ethical and Academic Integrity Concerns

With the increasing use of AI-generated content, future research should investigate ethical issues like plagiarism, authorship, and accountability. Empirical studies could evaluate how students understand institutional policies on AI use and how educators can develop clear guidelines to prevent misuse while encouraging productive engagement. Additionally, research could explore how students can be trained to critically assess and revise AI-generated content to ensure academic and professional standards are met.

Exploring Affective and Metacognitive Dimensions

Future studies should also explore the emotional and metacognitive aspects of students' interactions with AI tools. Research on how factors like motivation, anxiety, and metacognitive awareness (e.g., self-monitoring, strategy use) affect students' use of AI tools could help educators support students in developing balanced relationships with technology and adopting effective learning strategies.

These proposed directions for future research aim to fill existing gaps and further explore how AI tools can be used to improve translation education and professional development outcomes.

5.3.3 Concluding Remarks

The emergence of AI-driven educational tools marks a pivotal shift in the landscape of translation pedagogy. This study has offered a foundational examination of how such tools, when thoughtfully implemented, can serve not only to improve the technical competencies of translation students but also to support broader educational objectives such as learner autonomy, metacognitive engagement, and alignment with professional industry standards. By analyzing

the experiences of third-year English majors, the study has illuminated the multifaceted role that AI tools can play in translation instruction—from accelerating the production of preliminary drafts to fostering critical post-editing skills and exposing students to authentic translation workflows.

However, the integration of AI into the translation classroom is not without its complexities. As the findings suggest, the use of AI tools must be accompanied by robust pedagogical strategies that emphasize critical engagement rather than passive reliance. While these technologies can streamline certain aspects of the translation process and provide personalized feedback, they also introduce new pedagogical and ethical challenges, particularly in relation to academic integrity, originality, and the potential erosion of human linguistic intuition. As such, the role of the educator becomes increasingly vital—not as a gatekeeper of knowledge, but as a facilitator of thoughtful, reflective, and ethical engagement with technology.

Furthermore, this study underscores the importance of cultivating digital literacy and ethical awareness among translation students. As AI tools become more sophisticated and pervasive, future translators must be equipped not only with the technical skills to use such tools effectively but also with the critical faculties to question, evaluate, and improve upon machine-generated outputs. The development of these competencies requires instructional approaches that move beyond tool-based training and instead foster deep learning, adaptability, and an understanding of the theoretical underpinnings of translation.

The limitations acknowledged in this study point to several key areas for future scholarly exploration. Longitudinal studies that trace the impact of AI integration over time, large-scale comparative analyses across diverse educational contexts, and research into students' cognitive and affective responses to AI-mediated learning all represent promising directions that could substantially deepen our understanding of how technology shapes the translator's educational journey.

In conclusion, while AI-driven tools offer transformative potential for translation education, their effectiveness ultimately depends on the frameworks within which they are deployed. By integrating these tools into carefully designed pedagogical models—ones that balance innovation with rigor, automation with human insight, and efficiency with ethical responsibility—educators can prepare students not only to succeed in technologically mediated translation environments but also to contribute thoughtfully and responsibly to the evolving profession. It is the responsibility of both researchers and educators to ensure that the translation classroom remains a site of critical inquiry, adaptability, and ethical reflection in the face of rapid technological change.

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