

INVESTIGATING STUDENTS' ATTITUDES TOWARDS AI-POWERED TRANSLATION TOOLS IN ENGLISH LANGUAGE LEARNING AT A VIETNAMESE UNIVERSITY

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ABSTRACT

The rapid advancement of artificial intelligence (AI) has significantly transformed English language learning, particularly through the widespread use of AI-powered translation tools such as Google Translate, DeepL, and ChatGPT. This study investigates students' attitudes toward AI-powered translation tools at the School of Foreign Languages – Thai Nguyen University (SFL-TNU). A mixed-methods research design was employed involving 70 undergraduate English-major students. The study adopts the Technology Acceptance Model (TAM) as its theoretical framework. The findings reveal that students demonstrate generally positive attitudes toward AI translation tools due to their convenience, accessibility, and efficiency. However, concerns regarding translation accuracy and excessive dependence on these tools remain evident. The study highlights important pedagogical implications for integrating AI tools into language learning while encouraging critical and responsible use.

Keyword: AI translation tools, student attitudes, TAM, language learning, School of Foreign Languages – Thai Nguyen University

1. INTRODUCTION

Artificial intelligence (AI) has rapidly transformed educational practices, particularly in language learning contexts (Russell & Norvig, 2020). AI-powered translation tools such as Google Translate, DeepL, and ChatGPT have become widely used resources among English as a Foreign Language (EFL) learners. According to Groves & Mundt (2015) and O'Neill (2019), these technologies allow students to translate words, sentences, and texts instantly, providing quick access to linguistic information and facilitating learning processes.

In Vietnam, English is a compulsory subject in higher education. However, many students still encounter difficulties in vocabulary acquisition, grammar comprehension, and translation tasks. AI-based translation tools have therefore become practical learning supports that help learners overcome linguistic barriers efficiently.

Despite their advantages, the use of AI translation tools also raises several pedagogical concerns. Overreliance on automated translation may reduce learners' cognitive engagement and limit the development of independent language processing skills. Additionally, machine

translations may produce inaccuracies or fail to capture contextual nuances.

Understanding students' attitudes toward AI translation tools is essential because attitudes strongly influence technology adoption and learning behavior. Previous studies indicate that students generally perceive translation tools positively while remaining aware of their limitations (Alhaisoni, 2017 and Tsai, 2019).

Therefore, this study investigates students' attitudes toward AI-powered translation tools in English language learning at the School of Foreign Languages – Thai Nguyen University.

The study seeks to answer the following research questions:

1. What are students' attitudes toward AI-powered translation tools in English language learning?
2. What factors influence students' acceptance of these tools?

2. LITERATURE REVIEW

The Technology Acceptance Model (TAM) explains technology adoption based on two major factors: perceived usefulness (PU) and perceived ease of use (PEOU). According to Davis (1989), users are

more likely to accept a technology if they believe it enhances performance and is easy to operate.

Recent developments in artificial intelligence have significantly improved machine translation systems. Neural machine translation (NMT) models use deep learning algorithms to generate context-sensitive translations, resulting in higher accuracy and more natural outputs (Ghorianfar et al., 2023).

In language learning contexts, AI translation tools support learners in multiple ways, including vocabulary acquisition, reading comprehension, and writing assistance. These tools also provide immediate feedback and facilitate autonomous learning.

However, previous research also identifies several challenges associated with machine translation. Groves & Mundt (2015) and O'Neill (2019) insisted that students may become overly dependent on translation tools, which may reduce their motivation to actively process language input. Additionally, machine translation sometimes produces inaccurate or contextually inappropriate translations.

In the Vietnamese EFL context, studies suggest that students generally have positive perceptions of translation tools, particularly for improving reading comprehension and identifying language errors (Vy et al., 2025). Nevertheless, Tsai (2019) affirmed that some learners often need to revise machine-generated translations due to limitations in accuracy.

Beyond TAM factors, trust and perceived accuracy have also been identified as important determinants of users' attitudes toward AI technologies. If learners perceive AI outputs as unreliable, their trust decreases, which can negatively influence their attitudes and usage behavior (Cahyani, 2025).

Overall, AI translation tools provide both opportunities and challenges for language learning. Therefore, understanding students' perceptions is crucial for integrating these technologies effectively in educational settings.

3. METHODOLOGY

3.1. Research Design

This study employed a mixed-methods research design combining quantitative and qualitative

approaches. Quantitative data were collected through a structured questionnaire, while qualitative insights were obtained from semi-structured interviews.

3.2. Participants

The study involved 70 undergraduate English-major students at the School of Foreign Languages, Thai Nguyen University. Participants were selected using convenience sampling. Among them, 45 were female (64%) and 25 were male (36%), aged between 18 and 22. Their English proficiency ranged from B1 to B2 according to the Common European Framework of Reference (CEFR).

3.3. Instruments

A 30-item Likert-scale questionnaire was developed based on TAM constructs, including perceived usefulness (PU), perceived ease of use (PEOU), accuracy (ACC), trust (TR), attitude (ATT), and behavioral intention (BI). The questionnaire used a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). Reliability analysis produced Cronbach's alpha values ranging from 0.82 to 0.91, indicating strong internal consistency.

Additionally, semi-structured interviews were conducted with ten participants to explore their experiences and perceptions regarding the use of AI translation tools.

3.4. Data collection Procedure

Data were collected over a two-week period. The questionnaire was distributed online via Google Forms. Interviews were conducted face-to-face and recorded with participants' consent.

3.5. Data analysis

Quantitative data were analyzed using descriptive statistics and Pearson correlation analysis. Qualitative data were analyzed through thematic analysis to identify recurring patterns in students' responses.

4. FINDINGS AND DISCUSSION

4.1. Descriptive Statistics

The descriptive statistics indicate that students generally show positive attitudes toward AI translation tools.

Variable	Mean	SD
Usefulness (PU)	4.28	0.5
Ease of Use (PEOU)	4.35	0.47
Accuracy (ACC)	3.62	0.63
Trust (TR)	3.58	0.68
Attitude (ATT)	4.12	0.54
Intention (BI)	4.2	0.49

Table 1. Students' Perceptions of AI Translation Tools

The highest mean score was recorded for ease of use (4.35), indicating that students perceive AI translation tools as highly accessible and user-friendly.

4.2 Correlation Analysis

Correlation analysis shows significant relationships among the variables. The strongest relationship was observed between accuracy and trust ($r = .74$), indicating that perceived translation accuracy strongly influences users' trust in AI tools.

Additionally, perceived usefulness showed a strong positive relationship with attitude ($r = .72$), supporting the Technology Acceptance Model.

4.3 Discussion

The findings confirm that perceived usefulness and ease of use are major determinants of students' attitudes toward AI translation tools. These results align with TAM theory and previous research.

Accuracy was also found to be a critical factor influencing trust. Students reported moderate confidence in translation accuracy, suggesting that they recognize both the benefits and limitations of AI tools.

Another important finding concerns the issue of overreliance. Some students indicated that frequent use of translation tools may reduce their effort to analyze language independently. This

finding highlights the importance of guiding students in using AI tools critically rather than relying on them completely.

From a pedagogical perspective, teachers should integrate AI tools strategically in language learning activities. For example, students can compare machine translations with human translations or analyze translation errors to develop critical thinking.

5. CONCLUSION

This study investigated EFL students' attitudes toward AI-powered translation tools at the School of Foreign Languages – Thai Nguyen University.

The findings indicate that students generally have positive perceptions of AI translation tools due to their convenience, accessibility, and efficiency. However, concerns about translation accuracy and overdependence highlight the need for careful pedagogical guidance.

AI translation tools should therefore be used as supportive learning resources rather than substitutes for active language learning.

Future research may explore long-term learning outcomes associated with AI tool usage or investigate teachers' perspectives on integrating AI technologies into language education.

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