

# Exploring Student and Lecturer Perceptions of Artificial Intelligence in English for Tourism Training

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## Abstract

The integration of Artificial Intelligence (AI) is reshaping higher education, particularly in specialized fields such as English for Tourism (EfT). This study investigates the perceptions of 345 students and 211 lecturers in EfT programs at several Vietnamese universities regarding the application of AI in teaching and learning, **offering a novel comparative analysis within this specific and under-researched national context**. Using a cross-sectional quantitative design, data were collected through Likert-scale questionnaires measuring key dimensions such as effectiveness, experience, motivation, and tool quality. The data were analyzed using SPSS 25.0 through descriptive statistics, Cronbach's Alpha reliability testing, and one-way ANOVA. Findings reveal that students' **academic year level** significantly influenced their perceptions of learning effectiveness and experience & satisfaction, with first-year students reporting lower perceptions. Students' **AI proficiency** was significantly associated with their perceptions of learning effectiveness and motivation & engagement. For lecturers, **teaching experience** significantly affected perceptions of AI tool/material quality and challenges & motivation, while their **AI teaching skills** influenced perceptions of instructional effectiveness and perceived impact on students. **No significant differences were found for student motivation or tool quality based on academic year, nor for student experience/satisfaction or tool quality based on AI proficiency. Similarly, lecturer perceptions of instructional effectiveness or student impact did not vary by teaching experience, and perceptions of tool quality or challenges/motivation did not vary by AI teaching skills.** The study underscores the importance of enhancing digital competence, selecting appropriate AI tools, and tailoring integration strategies to optimize learning outcomes in the Vietnamese EfT context.

**Keywords:** *artificial intelligence, English for tourism, higher education, student perceptions, lecturer perceptions, technology integration*

## 1. Introduction

In the context of the Fourth Industrial Revolution, Artificial Intelligence (AI) is fundamentally transforming teaching and learning practices in higher education worldwide. The field of English for Tourism (EfT), which requires high levels of flexibility and international communication competence, is no exception to this trend. AI has been widely recognized for its benefits in language education, including personalized content delivery, instant feedback,

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and individualized learning support (Penprase, 2018; Zou, 2025). Tools such as ChatGPT, Grammarly, and Quill Bot have been shown to improve writing skills, enhance coherence, and increase learner satisfaction (Nguyen et al., 2023; Pham, 2022). However, integrating AI into EFT education also poses several challenges, such as the potential reduction in learner autonomy, limited human interaction, and the risk of misinformation caused by algorithmic bias or training data limitations (Karataş et al., 2024; Kundu & Bej, 2025). These issues highlight the need for a deeper understanding of how both students and lecturers perceive, experience, and engage with AI in the teaching and learning process.

This study aims to comprehensively examine and compare the perspectives of both lecturers and students regarding the use of AI in EFT education within the Vietnamese higher education context. While existing research has explored AI in general language learning or focused on single stakeholder groups, this study offers a novel contribution by systematically investigating the perceptions of these two key groups simultaneously within the specific, and relatively under-researched, domain of EFT in Vietnam. The research focuses on aspects such as perceived effectiveness, challenges, motivation, and the quality of AI tools. The findings are expected to provide both theoretical insights into AI adoption in specialized language programs and practical guidance for educational institutions in developing appropriate, effective, and human-centered AI integration strategies. The paper is structured into the following sections: literature review, methodology, results, discussion, and conclusion.

## **2. Literature Review**

### ***2.1. The rise and potential of AI in language education***

The rapid advancement of technology has accelerated the integration of Artificial Intelligence (AI) into language teaching and learning worldwide (Duong & Nguyen, 2024; Pham, 2022). In higher education, AI applications are increasingly utilized to enhance learning experiences, academic performance, and instructional quality by offering personalized and adaptive learning pathways (Abbes et al., 2024; Shahzad et al., 2025). Supported by

developments in natural language processing (NLP) and big data, AI-powered instructional programs provide flexible and accessible learning environments globally, with the potential to improve English language instruction and learner engagement (Zhao, 2025; Zou, 2025). These technologies are used for automated assessment, self-paced learning, personalized feedback, error correction, and even AI-assisted pronunciation training that simulates native speech (Karataş et al., 2024; Zou, 2025). The growing interest in AI's role, including its applications in teacher training, reflects its perceived potential to transform language education over the past decades (Kundu & Bej, 2025)

## ***2.2. Benefits of applying AI in language learning***

Research has highlighted numerous positive impacts of Artificial Intelligence (AI) on language learners. AI tools can significantly enhance personalized learning experiences (Gkountara et al., 2025; Karataş et al., 2024), provide real-time feedback, and support interactive and conversational practice (Karataş et al., 2024; Kundu & Bej, 2025). Specifically, tools such as Grammarly and Quill Bot have been shown to improve students' academic writing skills, enhancing coherence, cohesion, vocabulary use, sentence structure, and overall writing quality within a relatively short time frame (Ding & Zou, 2024; Marzuki et al., 2023). For example, students who used Quill Bot demonstrated noticeable improvement and expressed positive attitudes, along with a strong willingness to continue using the tool (Marzuki et al., 2023). Moreover, AI contributes to increased learner satisfaction by offering instant feedback and simulating real-life communication scenarios (Karataş et al., 2024), a feature highly appreciated by hospitality students who view AI as a valuable tool for better preparing them for the global workforce (Deri et al., 2024). Tools such as ChatGPT have also received relatively positive evaluations for their ability to improve English speaking skills and provide responsive feedback (Karataş et al., 2024). The accessibility, adaptability, and perceived ease of use of AI-based writing tools are often rated positively by students (Kim et al., 2025).

## ***2.3. Challenges and concerns regarding AI in language learning***

Despite its benefits, the integration of AI in language learning is not without challenges. A major concern lies in the potential overreliance on AI tools, which may lead to student laziness and hinder genuine language acquisition (Bauer et al., 2025; Zhai et al., 2024). Overdependence on technology can reduce learners' autonomy and diminish the role of traditional interactions with materials and instructors. Students have also expressed concerns about the lack of human-to-human interaction (Karataş et al., 2024; Zhai et al., 2024) as well as anxiety over unfamiliar technologies or the limited diversity of available tools (Cengiz & Peker, 2025). Additionally, AI systems may inadvertently reduce the role of teachers by automating tasks such as grading and feedback, which could undermine the pedagogical relationship (Celik et al., 2022). Ethical concerns including data privacy and security (Salloum, 2024). Ethical issues, such as concerns about privacy and the security of personal data (Akgun & Greenhow, 2022; Holmes et al., 2022), as well as the potential for algorithmic bias that may result in unfair outcomes or reinforce existing inequalities based on training data, are also critical considerations. Furthermore, practical challenges such as high implementation costs and the need for educators with adequate digital skills to use AI effectively remain significant obstacles (Holmes et al., 2022; Salloum, 2024).

#### ***2.4. Stakeholder perspectives and AI acceptance***

Understanding stakeholder perspectives is crucial for the successful integration of artificial intelligence (AI) into education. Research indicates that students generally hold balanced, pragmatic, or moderately positive views toward the use of AI in learning English and its implementation by instructors (Karataş et al., 2024; Kim et al., 2025). Factors influencing students' attitudes and intentions to use AI include perceived usefulness, ease of use, reference groups, self-regulation, information system quality, and intrinsic motivation (Kim et al., 2025; Zhai et al., 2024). The widespread use of various AI tools such as ChatGPT, Grammarly, and Quill Bot among students reflects a growing awareness of their potential (Karataş et al., 2024; Kim et al., 2025; Marzuki et al., 2023). However, some studies note low actual usage of certain

AI strategies despite their perceived effectiveness, underscoring the need for student-focused training (Kim et al., 2025; Zhai et al., 2024).

For lecturers, studies reveal generally positive attitudes toward the use of information and communication technologies (ICT), which can be extended to AI, in teaching English (Marzuki et al., 2023; Zou, 2025). However, effective AI integration requires a shift in the instructor's role toward that of a facilitator and guide. Although professional development programs can positively influence teachers' confidence and practices, factors such as English proficiency (in certain contexts) and rigid examination systems may pose barriers to change (Celik et al., 2022; Zou, 2025). To fully leverage AI's benefits, educators must adopt a thoughtful and creative approach to its use, maximizing impact while avoiding overdependence.

### ***2.5. The application of AI in English for tourism education in Vietnam***

While AI applications in general language learning have been widely studied, research specifically focused on English for Tourism (Eft) or the broader field of hospitality and tourism is still emerging, with a noticeable increase since 2018. Recent studies have shifted the focus from the technologies themselves to the attitudes and readiness of users namely, students and end-users (Huynh et al., 2025). In the Vietnamese context, existing studies highlight both the perceived opportunities and challenges from the perspectives of lecturers, as well as the balanced viewpoints of students in specific universities, underscoring the importance of understanding the local educational environment. The integration of smart tourism technologies, which emphasize personalization and accessibility, further reinforces the relevance of AI in preparing students for the demands of the tourism industry (Tran et al., 2025).

### ***2.6. Research gaps and study orientation***

Although recent studies have highlighted the potential of artificial intelligence (AI) in language education, most have focused on specific tools such as chatbots, writing assistants, or personalized learning systems. While some surveys have explored student or lecturer

perspectives, there is still a lack of comparative and systematic research examining both groups within the same educational context, which is essential to identify convergences and divergences in their perceptions. Moreover, most existing research has concentrated on general English, whereas English for Tourism (EfT) which requires the integration of linguistic and vocational competencies has received limited attention, particularly regarding AI applications. In Vietnam, there remains a shortage of empirical data on the readiness and perceptions of students and lecturers toward AI integration in EfT education. To address these gaps, this study aims to examine and compare the perceptions of EfT students and lecturers in Vietnamese higher education regarding AI applications, based on the following four hypotheses:

***H1:** There is a statistically significant difference in students' perceptions of AI based on academic year level.*

***H2:** There is a statistically significant difference in students' perceptions based on their AI proficiency.*

***H3:** There is a statistically significant difference in lecturers' perceptions based on their years of teaching experience.*

***H4:** There is a statistically significant difference in lecturers' perceptions based on their AI teaching skills.*

### **3. Methodology**

#### **3.1. Research design and instrument**

##### **3.1.1. Research Design**

This study employed a quantitative, cross-sectional survey design to investigate and compare the perceptions of students and lecturers regarding the integration of Artificial Intelligence (AI) into English for Tourism (EfT) education. The cross-sectional approach was selected to capture data at a single point in time, thereby allowing for comparative analysis across subgroups based on key variables such as academic year (students), AI proficiency

(students), teaching experience (lecturers), and AI teaching skills (lecturers). This research design is particularly appropriate for exploring attitudes, experiences, and perceived effectiveness related to AI tools within a specialized educational setting.

3.1.2. Instrument Development

To investigate stakeholder perceptions of Artificial Intelligence (AI) integration in English for Tourism (EfT) education, the researchers developed two structured questionnaires, one for students and one for lecturers based on a comprehensive review of recent empirical studies in AI-assisted language learning. The instruments were designed to capture both demographic information and attitudinal constructs related to AI usage in teaching and learning. Each questionnaire consisted of two main sections: the first section collected background variables such as academic year, AI proficiency (for students), and teaching experience and AI-related teaching skills (for lecturers); the second section employed 5-point Likert-scale items to measure perceptions across four core dimensions. For students, these included learning effectiveness, experience and satisfaction, motivation and engagement, and the perceived quality of AI tools and content. For lecturers, the constructs included instructional effectiveness, perceived impact on students, challenges and motivation, and quality of AI tools and content. The development of questionnaire items was informed by validated measurement frameworks and findings from relevant literature, including studies by Karataş et al. (2024), Kim et al. (2025), Zhai et al. (2024), Ding and Zou (2024), Abbes et al. (2024), and Kundu and Bej (2025). To ensure contextual relevance, the items were adapted to align with the characteristics of EfT programs in Vietnam. Content validity was assessed through expert review by two scholars specializing in educational technology and English for specific purposes. The final item sets, along with their respective constructs and sources, are presented in Tables 1 and 2.

**Table 1**

*Student survey questionnaire*

Coding	Construct and Items	Source
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<b>LE_sv Learning Effectiveness</b>		
LE_sv1	Teaching with integrated AI makes it easier for me to understand the subject content.	(Karataş et al., 2024)
LE_sv2	AI tools help me apply my knowledge to travel industry practices more effectively.	
LE_sv3	I use specialized terminology more accurately thanks to learning through AI tools.	(Ding & Zou, 2024)
LE_sv4	AI-assisted exercises help me consolidate my knowledge and skills better.	(Gkountara et al., 2025)
LE_sv5	I am more confident when using English in a career simulation situation.	(Deri et al., 2024)
<b>EX_sv Experience &amp; Satisfaction</b>		
EX_sv1	I'm happy with how instructors use AI in the classroom.	(Kim et al., 2025)
EX_sv2	AI creates a more interactive, modern, and fun learning environment.	(Karataş et al., 2024)
EX_sv3	Learning with AI makes the process of learning specialized English more attractive.	(Marzuki et al., 2023)
EX_sv4	The AI tools used are stable and easy to use.	(Kim et al., 2025)
<b>MO_sv Motivation &amp; Engagement</b>		
MO_sv1	AI helps me be more motivated to learn English majors.	(Kim et al., 2025)
MO_sv2	The AI tool encourages me to actively study on my own outside of regular classes.	(Zhai et al., 2024)
MO_sv3	I am willing to participate more actively in the classroom with the support of AI technology.	(Kim et al., 2025)
MO_sv4	AI fuels my creativity in learning and using English.	(Karataş et al., 2024)
MO_sv5	I hope that other subjects will also use AI to support learning.	(Kim et al., 2025)
<b>QU_sv Quality of AI tools &amp; content</b>		
QU_sv1	AI-integrated learning content is suitable for specialized English learning needs.	(Karataş et al., 2024)
QU_sv2	AI makes it easier for me to access materials and practice skills.	(Zhao, 2025)
QU_sv3	Combining teaching methods with AI brings high learning efficiency.	(Abbes et al., 2024)
QU_sv4	I appreciate the quality of the material, and the AI tools used on this course.	(Kim et al., 2025)

**Table 2**

*Lecturer Survey Questionnaire*



Code	Construct and Items	Source
<b>IN_gv Instructional Effectiveness</b>		
IN_gv1	Integrating AI into teaching helps students understand lessons better.	(Karataş et al., 2024)
IN_gv2	I adapt content and teaching methods to integrate AI effectively.	(Kundu & Bej, 2025)
IN_gv3	AI tools such as chatbots, virtual tutors, and automatic grading help increase engagement and personalize learning.	(Karataş et al., 2024)
IN_gv4	AI helps me design flexible lessons that are suitable for a variety of learners.	(Zou, 2025)
IN_gv5	AI helps students make connections between theory and practical applications in the Tourism industry.	(Deri et al., 2024)
<b>QU_gv Quality of AI tools and content</b>		
QU_gv1	The AI materials and tools I use/recommend are always updated, in line with modern training trends.	(Zhao, 2025)
QU_gv2	The combination of pedagogical methods and AI tools improves the efficiency of knowledge transfer.	(Abbes et al., 2024)
QU_gv3	I have enough resources (equipment, software, time, training) to implement AI in teaching.	(Holmes et al., 2022)
QU_gv4	I appreciate the quality of the materials and AI tools I am using in the course.	(Kim et al., 2025)
<b>CH_gv Challenges &amp; Motivation</b>		
CH_gv1	I'm having trouble selecting, using, and integrating the right AI tool.	(Cengiz & Peker, 2025)
CH_gv2	Technical infrastructure is not enough to meet the teaching with AI application.	(Holmes et al., 2022)
CH_gv3	I am concerned about ethics, data security, and bias in the use of AI in teaching.	(Akgun & Greenhow, 2022)
CH_gv4	The application of AI opens opportunities to create and innovate specialized English teaching methods.	(Karataş et al., 2024)
CH_gv5	I look forward to participating in more in-depth training courses on the application of AI in language teaching.	(Kundu & Bej, 2025)
<b>IM_gv Perceived Impact on Students</b>		
IM_gv1	Students make significant progress in specialized English skills when studying with AI technology.	(Deri et al., 2024)
IM_gv2	Students are more excited and motivated to learn with AI.	(Kim et al., 2025)
IM_gv3	AI helps students develop self-study, research, and critical thinking.	(Zhai et al., 2024)

IM\_gv4 Some students still face difficulties and lack initiative when using AI in learning.

IM\_gv5 I evaluate the integration of AI in teaching to have a positive effect on students' learning outcomes and learning attitudes. (Karataş et al., 2024)

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### **3.2. Sampling and Data Analysis Methods**

#### **3.2.1. Sampling strategy**

This study employed a convenience sampling approach to recruit participants due to practical limitations related to time, accessibility, and institutional scope. The target population consisted of two key stakeholder groups in English for Tourism (EfT) education in Vietnam: undergraduate students currently enrolled in EfT-related modules and lecturers responsible for teaching those modules at selected higher education institutions. Student participants were invited to participate through digital platforms commonly used for academic communication, including Zalo and Facebook class groups, with the assistance of course instructors. Lecturer participants were contacted via professional networks and subject-specific Facebook communities dedicated to English language teaching and tourism education. Data collection was conducted online using Google Forms from April 10 to April 30, 2025. After eliminating incomplete or invalid responses, the final sample comprised 345 students and 211 lecturers, representing a diverse cross-section of individuals engaged in AI-assisted EfT education across multiple institutions.

#### **3.2.2. Data analysis procedures**

Following data cleaning and anonymization, the collected responses were analyzed using IBM SPSS Statistics version 25.0. The analysis proceeded in three stages. First, descriptive statistics were employed to summarize demographic characteristics and background variables, as well as to compute mean scores and standard deviations for all perception-related constructs. Second, the internal consistency of each multi-item scale was assessed using Cronbach's alpha coefficients, with a threshold of 0.70 considered acceptable for reliability. Third, inferential statistical analysis was conducted using one-way analysis of variance

(ANOVA) to examine differences in perceptions among subgroups within each stakeholder category. Specifically, student perceptions were analyzed according to academic year and self-reported AI proficiency, while lecturer perceptions were examined based on years of teaching experience and AI teaching skills. Where significant differences were found, post hoc comparisons were carried out using Tukey’s Honest Significant Difference (HSD) test to identify specific group-level variations. This multi-step analytical approach enabled the study to rigorously test the four proposed hypotheses and provide insights into the factors influencing stakeholder perceptions of AI in English for Tourism education.

4. Results

4.1. Demographic characteristics

4.1.1. Student sample

The following table provides an overview of the students' genders, academic years, majors, AI skills, English proficiency, and learning devices. These figures help outline the demographic characteristics and technological capabilities of the research subjects, thereby clarifying the context affecting the application of AI in learning.

Table 3

Demographic characteristics of Student respondents (N = 345)

Characteristic	Fre. (N)	Per. (%)	Characteristic	Fre. (N)	Per. (%)
1. Gender	345	100.0%	4. AI skills	345	100.0%
Male	82	23.8%	Recognitional	32	9.3%
Female	263	76.2%	Basic	80	23.2%
			Analytical	135	39.1%
2. Academic year	345	100.0%	Creative	64	18.6%
First year	82	23.8%	Advanced	34	9.9%
Second year	78	22.6%	5. English Proficiency	345	100.0%
Third year	90	26.1%	Very poor	18	5.2%

Fourth year	95	27.5%	Poor	49	14.2%
			Average	123	35.7%
			Fair	121	35.1%
<b>3. Major</b>	345	100.0%	Good	34	9.9%
Tourism Management	85	24.6%	<b>6. Learning Devices</b>	345	100.0%
Travel & Leisure Services Management	86	24.9%	Laptop/PC	276	80.0%
Hotel Management	74	21.4%	Tablet	47	13.6%
Restaurant & Culinary Arts Management	100	29.0%	Others	22	6.4%

The final student sample included 345 participants. Female students made up the majority (76.2%), while male students accounted for 23.8%. In terms of academic year, the sample was relatively evenly distributed across first-year (23.8%), second year (22.6%), third year (26.1%), and fourth year (27.5%) students. Students were enrolled in various tourism-related majors such as Tourism Management (24.6%), Travel and Leisure Services Management (24.9%), Hotel Management (21.4%), and Restaurant and Culinary Arts Management (29.0%). Regarding self-rated AI proficiency, most students identified themselves at the “Analytical” level (39.1%), followed by “Basic” (23.2%), “Creative” (18.6%), “Recognitional” (9.3%), and “Advanced” (9.9%). English proficiency levels were mostly “Average” (35.7%) and “Fair” (35.1%), with smaller proportions reporting “Poor” (14.2%), “Very poor” (5.2%), and “Good” (9.9%). In terms of learning devices, the majority used laptops or PCs (80.0%), followed by tablets (13.6%) and other devices (6.4%).

#### *4.1.2. Lecturer sample*

This table summarizes the demographic characteristics and levels of readiness to adopt artificial intelligence (AI) among 211 lecturers who participated in the survey. Data are presented in terms of frequency and corresponding percentages for each variable.

**Table 4**

*Demographic characteristics and AI readiness of Lecturer respondents (N = 211)*

Characteristic	Fre. (N)	Per. (%)	Characteristic	Fre. (N)	Per. (%)
<b>1. Gender</b>	<b>211</b>	<b>100%</b>	<b>4. Academic qualification</b>	<b>211</b>	<b>100%</b>
Male	98	46.4%	Bachelor's degree	10	4.7%
Female	113	53.6%	Master's degree	56	26.5%
<b>2. Teaching Experience</b>	<b>211</b>	<b>100%</b>	Doctoral degree	135	64%
Less than 5 years	39	18.5%	Associate	10	4.7%
6–10 years	48	22.7%	Professor/Prof.		
11–20 years	76	36%	<b>5. AI skills</b>	<b>211</b>	<b>100%</b>
More than 20 years	48	22.7%	Awareness only	21	10%
<b>3. AI Readiness</b>	<b>211</b>	<b>100%</b>	Basic usage	39	18.5%
Not ready	25	11.8%	Selective application	69	32.7%
Considering	43	20.4%	Creative integration	51	24.2%
Trial stage	63	29.9%	Mastery & peer sharing	31	14.7%
Ready	56	26.5%			
Proactive	24	11.4%			

The results show that female lecturers slightly outnumber males (53.6% vs. 46.4%). Most participants hold doctoral (64%) or master's degrees (26.5%), indicating a highly qualified teaching force. The majority have over 11 years of teaching experience. In terms of AI skills, the highest proportion reported moderate competence (32.7%). Regarding AI readiness, the most common responses were “trial stage” (29.9%) and “ready” (26.5%), reflecting growing interest and potential for adopting AI in higher education teaching.

## ***4.2. Reliability analysis of measurement scales***

### ***4.2.1. Student scale***

The reliability analysis of the student questionnaire yielded a Cronbach's Alpha coefficient of 0.823, indicating a high level of internal consistency. One item (QU\_sv4) was removed due to a corrected item-total correlation of 0.161, which falls below the acceptable

threshold of 0.3. Consequently, 18 items were retained for further analysis. The retained items exhibited mean scores ranging from 2.545 to 4.206, with standard deviations between 0.660 and 1.050, indicating adequate variability in student responses. Most items demonstrated corrected item-total correlations above 0.3, confirming the overall reliability and coherence of the student scale.

#### *4.2.2. Lecturer scale*

For the lecturer questionnaire, the Cronbach's Alpha coefficient was 0.847, reflecting similarly high internal reliability. All 19 items were retained, as none fell below the acceptable correlation threshold. Item means scores ranged from 2.555 to 4.109, with standard deviations from 0.730 to 1.084, suggesting diverse and meaningful response distributions. Each item's corrected item-total correlation exceeded 0.3, further supporting the scale's consistency. Thus, the lecturer scale is considered statistically reliable and appropriate for subsequent analyses

### ***4.3. Comparison of Students' perceptions of AI application in EfT learning***

#### *4.3.1. Differences in Students' perceptions by academic year – Hypothesis H1 testing*

The results of the ANOVA (Table 5) indicated statistically significant differences in students' perceptions across academic years for two constructs: Learning Effectiveness ( $F(3, 341) = 5.125, p = 0.002$ ) and Experience & Satisfaction ( $F(3, 341) = 5.489, p = 0.001$ ). Post hoc LSD tests revealed that first-year students reported significantly lower perceived learning effectiveness and experience compared to students in the second, third, and fourth years. No significant differences were found across academic years for Motivation & Engagement ( $F(3, 341) = 0.323, p = 0.809$ ) or Quality of AI Tools & Content ( $F(3, 341) = 0.777, p = 0.507$ ). These findings partially support Hypothesis H1, suggesting that academic year influences students' perceptions of learning effectiveness and experience with AI-enhanced EfT learning, but not motivation or perceived tool quality.

**Table 5**

#### *ANOVA analysis results by school year (H1)*

Constructs	Sum of Squares	df	Mean Square	F	Sig.
Learning Effectiveness	8.212	3	2.737	5.125	0.002
Experience & Satisfaction	6.314	3	2.105	5.489	0.001
Motivation & Engagement	0.504	3	0.168	0.323	<b>0.809</b>
Quality of AI Tools & Content	0.908	3	0.303	0.777	<b>0.507</b>

#### *4.3.2. Differences in Students' perceptions by AI skills – Hypothesis H2 testing*

ANOVA results (Table 6) demonstrated that students' AI proficiency significantly affected perceptions of Learning Effectiveness ( $F(4, 340) = 5.056, p = 0.001$ ) and Motivation & Engagement ( $F(4, 340) = 4.354, p = 0.002$ ). Students with higher AI skills tended to report greater learning effectiveness and higher motivation when using AI in their studies. However, no significant differences were observed for Experience & Satisfaction ( $F(4, 340) = 0.313, p = 0.869$ ) or Quality of AI Tools & Content ( $F(4, 340) = 0.814, p = 0.517$ ), indicating that satisfaction and evaluations of AI tools may be influenced by factors other than AI proficiency, such as tool design or instructional implementation.

**Table 6**

*The results of the ANOVA test based on students' AI usage skills in relation to Hypothesis 2 (H2)*

Constructs	Sum of Squares	df	Mean Square	F	Sig.
Learning Effectiveness	11.000	4	2.750	5.056	0.001
Experience & Satisfaction	0.496	4	0.124	0.313	<b>0.869</b>
Motivation & Engagement	9.000	4	2.250	4.354	0.002
Quality of AI Tools & Content	1.269	4	0.317	0.814	<b>0.517</b>

#### *4.4. Comparison of Lecturers' perceptions of AI applications in EfT teaching*

#### *4.4.1. Differences in Lecturers' perceptions by years of teaching experience – Hypothesis H3 testing*

The one-way ANOVA results (Table 7) indicate that years of teaching experience significantly influence two dimensions of lecturers' perceptions: Quality of AI Tools & Content (QU\_gv),  $F(3, 207) = 6.302$ ,  $p < 0.001$ , and Challenges & Motivation (CH\_gv),  $F(3, 207) = 5.078$ ,  $p = 0.002$ . These findings support Hypothesis H3, suggesting that lecturers with varying levels of teaching experience differ in their evaluations of AI tools and their associated opportunities and barriers. Conversely, no significant differences were observed for Instructional Effectiveness (IN\_gv),  $F(3, 207) = 0.304$ ,  $p = 0.822$ , or Perceived Impact on Students (IM\_gv),  $F(3, 207) = 0.300$ ,  $p = 0.825$ . Therefore, Hypothesis H3 is not supported for these two constructs, indicating that teaching experience does not significantly affect lecturers' perceptions of AI's instructional effectiveness or its impact on students.

**Table 7**

*ANOVA results for Lecturers' perceptions by years of teaching experience*

Constructs	Sum of Squares	df	Mean Square	F	Sig.
Instructional Effectiveness	0.471	3	0.157	0.304	0.822
Quality of AI Tools & Content	8.922	3	2.974	6.302	0.000
Challenges & Motivation	7.271	3	2.424	5.078	0.002
Perceived Impact on Students	0.457	3	0.152	0.300	0.825

#### *4.4.2. Differences in Lecturers' perceptions by AI teaching skills – Hypothesis H4 testing*

In addition to teaching experience, lecturers' AI teaching skills were examined as a factor potentially influencing their perceptions of AI integration in English for Tourism instruction. ANOVA analysis (Table 8) was conducted with lecturers grouped by AI skill levels and perception scores as dependent variables.

**Table 8**

*ANOVA results comparing Lecturers' perceptions by AI teaching skills*



Constructs	Sum of Squares	df	Mean Square	F	Sig.
Instructional Effectiveness	7,205	3	2,402	4,812	0,003
Quality of AI Tools & Content	2,733	3	0,911	1,843	0,140
Challenges & Motivation	1,470	3	0,490	0,967	0,409
Perceived Impact on Students	6,281	3	2,094	4,231	0,006

Results show that AI teaching skills have a significant effect on two perception dimensions: Instructional Effectiveness (IN\_gv),  $F(3, 207) = 4.812$ ,  $p = 0.003$ , and Perceived Impact on Students (IM\_gv),  $F(3, 207) = 4.231$ ,  $p = 0.006$ . This supports Hypothesis H4, indicating that lecturers with higher AI proficiency tend to evaluate AI's instructional effectiveness and its impact on learners more positively. Post hoc Tukey HSD tests identified significant differences between skill groups, particularly between those categorized as "selective application" and "creative integration." However, no statistically significant differences were found for Quality of AI Tools & Content (QU\_gv),  $F(3, 207) = 1.843$ ,  $p = 0.140$ , or Challenges & Motivation (CH\_gv),  $F(3, 207) = 0.967$ ,  $p = 0.409$ . Thus, Hypothesis H4 is not supported for these two aspects, suggesting that AI teaching skills do not decisively influence lecturers' perceptions of AI-related materials, tools, or the challenges and motivations associated with AI application.

## 5. Discussion

### 5.1. Key findings

This study reveals significant differences in perceptions of AI applications in English for Tourism (EfT) education among students and lecturers, influenced by individual characteristics such as academic year, AI proficiency, and teaching experience.

*For students*, first-year students exhibited significantly lower perceptions of learning effectiveness and satisfaction with AI use compared to their senior counterparts, consistent with findings by (Karataş et al., 2024) and (Kim et al., 2025), who reported that familiarity and digital literacy increase positively with experience, thus enhancing perceived benefits of AI in

learning. Similarly, (Marzuki et al., 2023) demonstrated that greater exposure to AI writing tools correlates with improved attitudes and academic outcomes. This study confirms that AI proficiency strongly correlates with higher motivation and perceived learning effectiveness, aligning with (Gkountara et al., 2025) and (Kundu & Bej, 2025), who emphasized the role of technological competence in maximizing AI benefits. However, consistent with (Bauer et al., 2025), no significant differences were found in motivation and engagement across academic years, suggesting that factors beyond experience, such as intrinsic motivation or instructional design, might moderate these effects.

*Among lecturers*, teaching experience influenced perceptions of AI tool quality, and the challenges associated with AI adoption. This echoes findings by (Celik et al., 2022) and (Zou, 2025), who observed that seasoned educators may perceive AI tools differently due to their pedagogical paradigms and adaptation challenges. In contrast, AI proficiency among lecturers significantly affected perceptions of instructional effectiveness and impact on students, corroborating the arguments of (Kim et al., 2025) and (Kundu & Bej, 2025) on the critical role of digital skills for educators in technology integration. The absence of significant differences in perceptions of challenges and motivations across AI skill levels suggests, as (Salloum, 2024) pointed out, that ethical and infrastructural issues transcend individual competencies and require institutional interventions.

## ***5.2. Novel contributions and practical implications***

Unlike many previous studies focusing primarily on general English language learning (Duong & Nguyen, 2024; Pham, 2022), this research uniquely targets the specialized domain of English for Tourism (EfT) in Vietnam, addressing an empirical gap highlighted by Huynh et al. (Huynh et al., 2025). The comparative approach examining both student and lecturer perspectives within the same educational context offers a comprehensive understanding rarely achieved in prior research. The identification of academic year and AI skills as key differentiators among students, and the combined influence of teaching experience and AI skills

among lecturers, provides nuanced insights into the dynamics shaping AI adoption perceptions in specialized foreign language education.

Practical implications resonate with established recommendations from Holmes et al. (2022) and Tran et al. (2025), advocating for tailored AI training programs for both students and faculty, development of contextualized AI materials, and the ethical application of AI technologies. This study reinforces the urgency of such interventions within Vietnamese higher education, emphasizing the balance between leveraging AI's pedagogical advantages and maintaining human-centered educational values (Cengiz & Peker, 2025).

### ***5.3. Limitations and directions for future research***

While confirming several trends reported in the literature, the study also reveals areas requiring further exploration. The relatively limited influence of AI skills on perceptions of AI tool quality contrasts with some previous findings (Ding & Zou, 2024), suggesting possible cultural or institutional factors unique to the Vietnamese context. Future research could adopt longitudinal designs to assess changes over time or incorporate qualitative methods to deepen understanding of underlying attitudes and barriers. Additionally, expanding the sample to include diverse institutions and integrating objective performance metrics would enhance generalizability and practical relevance.

## **6. Conclusion**

This study has illuminated the perceptions of lecturers and students majoring in English for Tourism (EfT) in Vietnam regarding the application of Artificial Intelligence (AI) in teaching and learning. The findings indicate that both groups recognize AI as a promising educational tool, yet notable differences in their assessments exist based on factors such as academic year, teaching experience, and technological proficiency. Proficiency in AI usage plays a critical role in shaping awareness of learning effectiveness, instructional methods, and

motivational engagement. This underscores the urgent need to enhance digital competencies among both learners and educators.

The results offer significant implications for developing appropriate AI integration strategies, creating high-quality resources, and ensuring ethical considerations in technology applications. Although some limitations remain, the study provides valuable empirical evidence that contributes to guiding future research and practical implementations aimed at optimizing the use of AI in specialized foreign language education.

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