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ARTIFICIAL INTELLIGENCE IN ENGLISH LANGUAGE LEARNING: STUDENT PERSPECTIVES ON AI LITERACY, ACADEMIC INTEGRITY, AND DEPENDENCY AT UNIVERSIDAD TECNOLÓGICA DE TIJUANA

LA INTELIGENCIA ARTIFICIAL EN EL APRENDIZAJE DEL INGLÉS: PERSPECTIVAS ESTUDIANTILES EN LA ALFABETIZACIÓN DE LA IA, INTEGRIDAD ACADÉMICA, Y DEPENDENCIA EN LA UNIVERSIDAD TECNOLÓGICA DE TIJUANA

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Artificial Intelligence in English Language Learning: Student Perspectives on AI Literacy, Academic Integrity, and Dependency at Universidad Tecnológica de Tijuana

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ABSTRACT

The increasing use of generative artificial intelligence (GenAI) in higher education has created new opportunities for English language learning while also raising concerns regarding academic integrity, student dependency, AI literacy, and institutional regulation. This study aims to analyze university students' perceptions of these four dimensions in the context of English language learning at a technological university in Mexico. A quantitative, non-experimental, cross-sectional, and correlational research design was employed. Data were collected from 214 university students through a 16-item questionnaire organized into four constructs: Academic Integrity, AI Literacy, AI Dependency, and Institutional Regulation. Descriptive statistics, Cronbach's alpha, Pearson's correlation coefficient, and Kruskal–Wallis tests were used to analyze the data. The results showed relatively high levels of AI Literacy ($M = 3.77$, $SD = 0.88$) and Academic Integrity ($M = 3.61$, $SD = 0.86$), whereas AI Dependency obtained a lower mean ($M = 2.61$, $SD = 0.78$). AI Literacy was positively correlated with Academic Integrity ($r = .684$, $p < .001$), while Academic Integrity and AI Literacy were also positively associated with Institutional Regulation. AI Dependency showed weak negative correlations with Academic Integrity and AI Literacy. Significant differences according to frequency of AI use were found for AI Dependency and Institutional Regulation, but not for Academic Integrity or AI Literacy. The findings suggest that responsible AI integration in English language education requires more than regulating access to technology; it also requires developing students' AI literacy, maintaining academic integrity, and promoting learner autonomy through clear institutional guidance.

Keywords: artificial intelligence, academic integrity, AI literacy, AI dependency, English language learning

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La Inteligencia Artificial en el Aprendizaje del Inglés: Perspectivas Estudiantiles en la Alfabetización de la IA, Integridad Académica, y dependencia en la Universidad Tecnológica de Tijuana

RESUMEN

El creciente uso de la inteligencia artificial generativa (IAGen) en la educación superior ha generado nuevas oportunidades para el aprendizaje del inglés, pero también preocupaciones relacionadas con la integridad académica, la dependencia tecnológica, la alfabetización en inteligencia artificial y la regulación institucional. El objetivo de este estudio fue analizar las percepciones del estudiantado universitario respecto a estas cuatro dimensiones en el contexto del aprendizaje del inglés en una universidad tecnológica de México. Se empleó un diseño de investigación cuantitativo, no experimental, transversal y correlacional. Los datos se recopilaron mediante un cuestionario de 16 ítems aplicado a 214 estudiantes universitarios, organizado en cuatro constructos: Integridad Académica, Alfabetización en IA, Dependencia de la IA y Regulación Institucional. Para el análisis se utilizaron estadísticos descriptivos, alfa de Cronbach, coeficiente de correlación de Pearson y pruebas de Kruskal–Wallis. Los resultados mostraron niveles relativamente altos de Alfabetización en IA ($M = 3.77$, $DE = 0.88$) e Integridad Académica ($M = 3.61$, $DE = 0.86$), mientras que la Dependencia de la IA presentó una media menor ($M = 2.61$, $DE = 0.78$). La Alfabetización en IA presentó una correlación positiva con la Integridad Académica ($r = .684$, $p < .001$), y tanto la Integridad Académica como la Alfabetización en IA se asociaron positivamente con la Regulación Institucional. La Dependencia de la IA mostró correlaciones negativas débiles con la Integridad Académica y la Alfabetización en IA. Se identificaron diferencias significativas según la frecuencia de uso de IA en Dependencia de la IA y Regulación Institucional, pero no en Integridad Académica ni Alfabetización en IA. Los resultados sugieren que la integración responsable de la IA en la enseñanza y el aprendizaje del inglés requiere no solo regular el acceso a la tecnología, sino también desarrollar la alfabetización en IA, fortalecer la integridad académica y promover la autonomía del estudiantado mediante orientaciones institucionales claras.

Palabras clave: inteligencia artificial, integridad académica, alfabetización en inteligencia artificial, dependencia de la IA

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INTRODUCTION

The rapid development of generative artificial intelligence (GenAI) has introduced new possibilities and challenges for higher education. Tools based on large language models can provide students with immediate explanations, personalized assistance, language correction, translation, and opportunities for interactive practice. In English language education, these capabilities are particularly relevant because students can use conversational AI to practice language skills beyond the classroom and obtain immediate feedback during independent learning. Recent systematic reviews indicate that GenAI research in language education has expanded considerably since the emergence of ChatGPT, with higher education and English as a Foreign Language (EFL) contexts representing a substantial proportion of the empirical literature (Li et al., 2024; Li et al., 2025).

The growing use of GenAI, however, also challenges traditional understandings of academic work. The distinction between legitimate technological assistance and inappropriate academic substitution can be difficult to establish, particularly when AI tools can generate, revise, translate, or substantially transform students' work. Student perspectives are therefore important for understanding how these boundaries are perceived in actual educational contexts. Johnston et al. (2024), in a study involving 2,555 university students, found that students were more supportive of some forms of AI-assisted academic work than of using generative AI to produce entire assignments. The study also reported substantial student support for university-wide policies clarifying when generative AI technologies are appropriate to use.

This situation places **academic integrity** at the center of discussions surrounding AI in higher education. The challenge extends beyond traditional forms of plagiarism because students may employ AI for activities ranging from brainstorming and language correction to generating substantial portions of academic assignments. A systematic review by Bittle and El-Gayar (2025) identified both educational opportunities and risks associated with GenAI in relation to academic integrity and emphasized the importance of responsible use, appropriate assessment practices, and academic honesty. In this context, academic integrity increasingly involves questions of authorship, transparency, attribution, and students' responsibility for the work they submit.

Closely related to academic integrity is **AI literacy**. Responsible use of artificial intelligence requires more than the ability to operate an AI application. Students also need to understand the capabilities and

limitations of AI systems, evaluate the reliability of generated information, recognize potential inaccuracies or biases, and make informed decisions about appropriate use. Lintner (2024), through a systematic review of AI literacy scales, identified multiple approaches to conceptualizing and measuring AI literacy. Similarly, Ng et al. (2024) conceptualized AI literacy through affective, behavioral, cognitive, and ethical dimensions, emphasizing that AI literacy includes knowledge, skills, attitudes, and ethical judgment. Recent research has further emphasized the need to assess AI literacy as a complex competence that extends beyond technical interaction with AI systems.

AI literacy is particularly relevant in language learning because students may use GenAI to obtain explanations, generate and revise texts, practice vocabulary and grammar, receive feedback, and engage in conversational activities. A systematic review of research on ChatGPT and language education found that the technology has been investigated across several language-learning and teaching activities, reflecting its potential to support different aspects of language development (Li et al., 2024). Li et al. (2025) similarly found that AI chatbots have increasingly been incorporated into language-learning activities, with research addressing learning outcomes, interaction, and instructional design. More recent research has also reported positive student perceptions of GenAI in EFL writing, including associations with self-efficacy, satisfaction, and behavioral intention (Almusharraf et al., 2025). In addition, intervention research with university ESL learners has found that ChatGPT can function as a formative feedback tool for academic writing when students receive appropriate guidance and training (Mahapatra, 2024).

At the same time, the increasing availability of AI tools raises concerns regarding **AI dependency and overreliance**. Frequent use of AI does not necessarily indicate problematic dependence, since students may legitimately use these technologies for language practice, clarification, feedback, or self-directed learning. Nevertheless, excessive reliance may become problematic when AI replaces rather than supports students' own cognitive and linguistic processes. Research on university students' use of GenAI in language learning has specifically examined patterns of reliance and resistance, highlighting the importance of understanding how students position AI in relation to their own learning processes (Wang et al., 2025). Similarly, a recent systematic review of GenAI in EFL education reported concerns regarding overreliance and the possible effects of AI use on learners' critical thinking and autonomous

engagement (Liu et al., 2025). This distinction between supportive use and substitution is especially important in English language education, where active language production, revision, reflection, and problem solving constitute essential components of learning.

A fourth dimension relevant to responsible AI use is **institutional regulation**. As GenAI becomes increasingly present in higher education, institutions have begun developing policies and guidelines to clarify appropriate uses, responsibilities, academic integrity expectations, and ethical considerations. An et al. (2025), in an analysis of higher education institutional guidelines, found that policies address several aspects of GenAI use, including academic integrity, teaching and learning, responsible use, privacy, and the limitations of AI-generated content. McDonald et al. (2025) similarly examined institutional policies and guidelines and identified an increasing emphasis on establishing frameworks for the responsible integration of generative AI in higher education. These developments suggest that institutional regulation is becoming an important component of AI governance in educational contexts.

Institutional regulation is particularly relevant from the student perspective because uncertainty regarding acceptable AI use may affect how students make decisions about academic work. Johnston et al. (2024) reported that university students expressed support for clearer institutional guidance concerning when generative AI should or should not be used. Recent research in EFL writing has likewise emphasized the importance of course- and institution-level policies that clarify permitted and prohibited uses, disclosure expectations, privacy considerations, and academic integrity standards (Almusharraf et al., 2025). Thus, institutional regulation should not necessarily be understood exclusively as a restrictive mechanism. Clear guidelines may also provide students and educators with a framework for distinguishing acceptable assistance from inappropriate academic substitution.

The interaction among AI literacy, academic integrity, dependency, and institutional regulation is particularly relevant because these dimensions may influence how students understand and negotiate the role of AI in their academic work. Research on task-based language learning, for example, suggests that the educational value of GenAI depends partly on how AI affordances are integrated into learning activities and instructional design rather than simply on access to the technology (Li et al., 2026). This perspective reinforces the importance of examining not only whether students use AI, but also how they understand and regulate its use within educational contexts.

Despite the rapid growth of research on GenAI in higher education and language education, important gaps remain. Existing studies have examined student perceptions, academic integrity, AI literacy, dependency or overreliance, and institutional policies; however, these dimensions are frequently examined separately. Recent systematic research indicates that the field is moving from predominantly exploratory studies toward more empirical and systematic investigations, while also identifying the need for additional research across educational contexts and geographical settings (Li et al., 2025).

Furthermore, the intersection of **AI literacy, academic integrity, AI dependency, and institutional regulation specifically within English language learning in technological higher education contexts** remains insufficiently explored. This gap is relevant in the Mexican context, particularly within technological universities where students are prepared for professional environments characterized by increasing digitalization and emerging AI technologies. Examining students' perceptions of these dimensions can provide evidence to inform educational practices and institutional strategies for responsible AI integration.

Therefore, the present study aims to analyze university students' perceptions of **academic integrity, AI literacy, AI dependency, and institutional regulation** regarding the use of artificial intelligence for English language learning at a technological university in Mexico. Specifically, the study examines the relationships among these four dimensions and explores whether students' perceptions vary according to their frequency of AI use for English language learning.

Based on the literature reviewed and the conceptual relationships among the four dimensions, the study proposes the following hypotheses:

H1. AI literacy is positively associated with academic integrity among university students.

H2. AI dependency is negatively associated with academic integrity among university students.

H3. AI literacy is positively associated with support for institutional regulation of AI use.

H4. Academic integrity is positively associated with support for institutional regulation of AI use.

MATERIALS AND METHODS

Research Approach and Design

This study employed a quantitative, non-experimental, cross-sectional, descriptive-correlational design. The study was conducted to examine university students' perceptions of artificial intelligence (AI) use

in English language learning and to identify relationships among four dimensions: **Academic Integrity, AI Literacy, AI Dependency, and Institutional Regulation**.

A quantitative approach was selected because the study collected numerical data through a structured questionnaire and used descriptive and inferential statistical procedures to analyze participants' responses. The non-experimental design was appropriate because no variables were manipulated and participants were observed within their existing educational context. The cross-sectional design involved collecting the data at a single point in time.

Participants

The participants were **214 university students** enrolled in English language courses at the Universidad Tecnológica de Tijuana (UTT), Mexico. The participants represented the technological university context in which English is part of their academic preparation.

A non-probability convenience sampling procedure was employed. Participation was voluntary, and students were invited to answer an online questionnaire. Participation in the study had no effect on students' academic grades or course evaluation.

Research Instrument

Data were collected through a **16-item questionnaire** designed to examine students' perceptions of responsible AI use in English language learning. The questionnaire comprised four constructs, with four items assigned to each construct:

- **Academic Integrity**
- **AI Literacy**
- **AI Dependency**
- **Institutional Regulation**

The questionnaire was developed based on indicators identified in previous literature concerning AI literacy, academic integrity, responsible use of artificial intelligence, technological dependence, and institutional guidance. The indicators were contextualized to the specific setting of AI-assisted English language learning.

All items were presented as statements and measured using a **five-point Likert scale**, ranging from **1 = Strongly Disagree** to **5 = Strongly Agree**.

The Academic Integrity construct addressed students' perceptions of honesty, authorship, transparency, and responsible use of AI in academic activities. AI Literacy focused on students' perceived ability to understand, evaluate, and use AI-generated information critically. AI Dependency addressed perceived reliance on AI when performing English language learning activities. Institutional Regulation examined perceptions regarding the need for institutional policies, guidelines, and training concerning the appropriate use of AI.

Data Collection Procedure

The questionnaire was administered online to students enrolled in English language courses at UTT. Before answering the questionnaire, participants received information about the purpose of the study and the voluntary nature of their participation.

Participants were informed that their responses would be treated confidentially and used exclusively for academic and research purposes. Informed consent was obtained before participants proceeded to the questionnaire.

The questionnaire was completed individually, and participants were not required to provide directly identifying information.

Data Analysis

The responses were organized and analyzed using **Microsoft Excel**.

Descriptive statistics were first calculated for the four constructs. Means (M) and standard deviations (SD) were used to describe the general distribution of participants' responses.

For each construct, the responses to its four corresponding items were combined to obtain a composite score. These scores were subsequently used for the correlational analysis.

The internal consistency of the questionnaire was examined using **Cronbach's alpha (α)**. The reliability analysis was conducted for the complete instrument and for the individual constructs.

To examine the relationships among Academic Integrity, AI Literacy, AI Dependency, and Institutional Regulation, **Pearson's correlation coefficient (r)** was calculated. Statistical significance was established at $\mathbf{p < .05}$.

Finally, differences in participants' perceptions according to their **frequency of AI use for English language learning** were examined using the **Kruskal–Wallis test**. This procedure was used to compare the distributions of the construct scores across the different AI-use frequency groups.

Ethical Considerations

The study followed basic ethical principles for research involving university students. Participation was voluntary, informed consent was obtained before data collection, and participants were informed of the academic purpose of the study.

The confidentiality of the responses was maintained throughout the data collection and analysis processes. The information obtained was used exclusively for research purposes, and no personally identifying information was required as part of the questionnaire.

RESULTS

A total of 214 university students participated in the study. Participants completed a 16-item questionnaire organized into four constructs: **Academic Integrity, AI Literacy, AI Dependency, and Institutional Regulation**. Responses were recorded on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

3.1 Descriptive Statistics

Table 1 presents the descriptive statistics for the four constructs. AI Literacy obtained the highest mean score (M = 3.77, SD = 0.88), followed by Academic Integrity (M = 3.61, SD = 0.86) and Institutional Regulation (M = 3.47, SD = 0.93). AI Dependency obtained the lowest mean score (M = 2.61, SD = 0.78).

Table 1. Descriptive statistics of the four constructs

Construct	Items	M	SD
Academic Integrity	4	3.61	0.86
AI Literacy	4	3.77	0.88
AI Dependency	4	2.61	0.78
Institutional Regulation	4	3.47	0.93

At the item level, the highest mean was observed for the statement *"I understand that AI-generated responses may contain mistakes"* (M = 3.89, SD = 1.12). Within the Academic Integrity construct, the statement *"Using AI to correct grammar or vocabulary is different from letting AI complete an entire assignment"* obtained a mean of 3.73 (SD = 1.11).

Internal Consistency

The internal consistency of the instrument was assessed using Cronbach's alpha. The complete 16-item questionnaire obtained an overall coefficient of **α = .870**.

The coefficients for the individual constructs were .756 for Academic Integrity, .808 for AI Literacy, .632 for AI Dependency, and .846 for Institutional Regulation.

Table 2. Internal consistency of the instrument

Construct	**Items**	**Cronbach's α**
Academic Integrity	4	.756
AI Literacy	4	.808
AI Dependency	4	.632
Institutional Regulation	4	.846
Total instrument	**16**	**.870**

Correlations Among Constructs

Pearson's correlation coefficient was used to examine the relationships among the four constructs. The results are presented in Table 3.

Table 3. Pearson correlations among study constructs

Construct	Academic Integrity	AI Literacy	AI Dependency	Institutional Regulation
Academic Integrity	—	.684***	−.172*	.621***
AI Literacy	.684***	—	−.188*	.617***
AI Dependency	−.172*	−.188*	—	.011
Institutional Regulation	.621***	.617***	.011	—

Note. p < .05. **p < .001.

A strong positive correlation was identified between AI Literacy and Academic Integrity (r = .684, p < .001). Academic Integrity was also positively correlated with Institutional Regulation (r = .621, p < .001), while AI Literacy showed a positive correlation with Institutional Regulation (r = .617, p < .001). AI Dependency showed weak negative correlations with Academic Integrity (r = −.172, p = .012) and AI Literacy (r = −.188, p = .006). No significant correlation was found between AI Dependency and Institutional Regulation (r = .011, p = .871).

Differences According to Frequency of AI Use

Participants reported five levels of AI use for English language learning: **Never (n = 8), Rarely (n = 28), Sometimes (n = 103), Frequently (n = 58), and Everyday (n = 17).**

A Kruskal–Wallis test was conducted to examine differences in the four constructs according to frequency of AI use.

No statistically significant differences were found for Academic Integrity, H(4) = 9.27, p = .055, or AI Literacy, H(4) = 9.14, p = .058.

Statistically significant differences were found for AI Dependency, H(4) = 19.63, p < .001, and Institutional Regulation, H(4) = 16.57, p = .002.

Table 4. Mean construct scores according to frequency of AI use

Frequency of AI use	n	Academic Integrity	AI Literacy	AI Dependency	Institutional Regulation
Never	8	3.81	3.88	1.69	3.50
Rarely	28	3.45	3.78	2.55	3.56
Sometimes	103	3.48	3.59	2.52	3.22
Frequently	58	3.75	3.97	2.78	3.72
Everyday	17	4.07	4.07	3.06	3.96

The highest mean AI Dependency score was observed among participants who reported using AI every day (M = 3.06), whereas the lowest was observed among those who reported never using AI (M = 1.69). For Institutional Regulation, participants in the Everyday-use group also obtained the highest mean score (M = 3.96).

The Kruskal–Wallis results therefore indicate that frequency of AI use was significantly associated with differences in AI Dependency and Institutional Regulation, but not with Academic Integrity or AI Literacy.

DISCUSSION

The findings of this study provide evidence that university students perceive artificial intelligence as a relevant learning resource while simultaneously recognizing the need for responsible use. The four dimensions examined—Academic Integrity, AI Literacy, AI Dependency, and Institutional Regulation—showed different patterns of association, suggesting that students' perceptions of AI cannot be understood solely in terms of frequency of use. Instead, responsible AI use appears to involve the interaction between students' knowledge of AI, their understanding of academic responsibility, their perceived reliance on the technology, and the institutional framework surrounding its use.

The highest mean score was observed for **AI Literacy** (M = 3.77), suggesting that participants generally perceived themselves as capable of recognizing important characteristics and limitations of AI-generated content. This finding is consistent with the growing emphasis on AI literacy as a

multidimensional competence involving not only technical knowledge but also cognitive and ethical abilities. Ng et al. (2024), for example, conceptualized AI literacy through affective, behavioral, cognitive, and ethical dimensions, highlighting that responsible AI use requires students to understand and critically evaluate AI rather than simply operate AI tools. Similarly, Oda et al. (2025), in an EFL context, examined students' perceptions of generative AI following an AI literacy program, highlighting the relevance of developing students' understanding of AI within language-learning contexts.

The relatively high score for **Academic Integrity** (M = 3.61) is also noteworthy. Participants appeared to distinguish between forms of AI assistance that may support learning and forms of use that could replace students' own academic work. This distinction is particularly relevant to English language learning, where AI can be used for grammar correction, vocabulary support, feedback, translation, and conversational practice. Previous research has similarly found that students do not necessarily perceive all forms of generative AI use as equally acceptable. Johnston et al. (2024), for instance, found considerable support for some assistive uses of AI but substantially less support for using ChatGPT to produce an entire academic assignment. Their findings also highlighted students' demand for clearer institutional guidance concerning appropriate AI use.

The positive and relatively strong correlation between **AI Literacy and Academic Integrity** ($r = .684$, $p < .001$) represents one of the most relevant findings of the study. This association suggests that students who perceive themselves as more knowledgeable and capable of evaluating AI may also report stronger perceptions of academic integrity. The relationship should not be interpreted causally because of the cross-sectional and non-experimental design. Nevertheless, it supports the argument that AI literacy and academic integrity should be addressed together rather than treated as independent educational concerns. This finding is particularly significant in English language education. A systematic review of research on ChatGPT and language education found that the technology is being used for self-directed learning, content generation, feedback, and other language-learning activities, while ethical considerations remain an important area of research (Li et al., 2024). Lee et al. (2026) similarly identified the growing body of research examining GenAI in language classrooms and highlighted both its pedagogical potential and the challenges associated with its implementation. More recent research in ESL/EFL contexts indicates

that ChatGPT has become a significant object of investigation in English language education, with benefits and challenges requiring consideration simultaneously.

The relationship between **AI Dependency and Academic Integrity** was weak and negative ($r = -.172$, $p = .012$). Although the effect was small, its direction suggests that greater perceived reliance on AI may be associated with weaker perceptions of academic integrity. This result is consistent with concerns in the literature regarding excessive reliance on generative AI. Wang et al. (2025), for example, examined university students' reliance on and resistance to GenAI in language learning, emphasizing the importance of understanding how students position AI in relation to their own learning. Liu et al. (2025) similarly identified concerns regarding overreliance on GenAI and its potential implications for learners' critical thinking in EFL education. However, the finding should be interpreted cautiously. Dependency was the construct with the lowest internal consistency in the present instrument ($\alpha = .632$), and therefore the measurement of this dimension warrants further refinement in future studies. Moreover, frequent use of AI should not automatically be equated with problematic dependence. Students may use AI frequently for legitimate language-learning purposes without relinquishing responsibility for their learning.

The results concerning **Institutional Regulation** are particularly relevant for higher education institutions. Institutional Regulation showed positive correlations with both AI Literacy ($r = .617$, $p < .001$) and Academic Integrity ($r = .621$, $p < .001$). These associations suggest that students who report stronger perceptions of AI literacy and academic integrity also tend to support or recognize the importance of institutional guidance regarding AI use. This finding is consistent with recent analyses of higher education policies. An et al. (2025) found that university guidelines increasingly address AI integration, academic integrity, ethical considerations, and responsibilities related to the use of generative AI. Similarly, McDonald et al. (2025) reported that many higher education institutions have moved from an initial emphasis on restricting GenAI toward providing guidance for its productive integration into teaching and learning.

An important finding was that **AI Dependency was not significantly correlated with Institutional Regulation** ($r = .011$, $p = .871$). This suggests that perceiving oneself as dependent on AI and supporting institutional regulation may represent different aspects of students' experiences. In other words, students' personal reliance on AI does not necessarily determine whether they believe institutions should

establish policies or guidelines. This distinction is important because institutional regulation should not be designed exclusively as a response to individual students' frequency of use. Instead, institutional policies may need to address broader issues such as transparency, acceptable uses, assessment practices, privacy, and academic responsibility.

The analysis according to **frequency of AI use** provides additional insight. Significant differences were found for AI Dependency and Institutional Regulation, whereas the differences for Academic Integrity and AI Literacy did not reach the .05 significance level. The pattern for AI Dependency is understandable given that participants who reported everyday AI use obtained the highest mean score for this construct. However, the cross-sectional nature of the study prevents determining whether more frequent AI use leads to greater dependency or whether students who already feel more dependent are more likely to use AI frequently.

The finding that frequency of use was not significantly associated with AI Literacy is also relevant. More frequent use of an AI tool does not necessarily imply greater AI literacy. AI literacy involves the ability to understand, evaluate, and use AI appropriately, and therefore repeated interaction with a tool may occur without a corresponding development of critical or ethical knowledge. This distinction reinforces the importance of explicitly incorporating AI literacy into English language instruction rather than assuming that students will acquire it simply through exposure to AI technologies. The relevance of structured AI literacy development is also supported by Oda et al. (2025), whose work specifically examined EFL learners' perceptions in the context of an AI literacy program.

The significant differences in **Institutional Regulation** across AI-use frequency groups may indicate that students' experiences with AI influence their expectations regarding institutional guidance. Participants who reported everyday use presented the highest mean for Institutional Regulation. This result may reflect greater awareness among frequent users of the practical and ethical questions surrounding AI use in academic work. Nevertheless, this interpretation remains tentative and should be examined through qualitative research or longitudinal designs.

Taken together, the findings suggest that the responsible integration of AI into English language learning should not be approached exclusively through prohibition or unrestricted adoption. Instead, institutions and teachers may need to establish a framework in which students are explicitly taught how to use AI

critically, transparently, and purposefully. In English language courses, this may include activities in which students evaluate AI-generated language, identify inaccuracies, compare AI feedback with teacher or peer feedback, document their use of AI, and reflect on how the technology contributes to rather than replaces their own learning. This approach is consistent with recent research emphasizing that the pedagogical value of GenAI depends not simply on access to the technology but also on how it is incorporated into learning activities and instructional design (Li et al., 2026).

From an institutional perspective, the findings support the development of clear and accessible guidelines. Recent analyses of institutional policies show that universities are increasingly addressing GenAI through guidance related to teaching, learning, assessment, academic integrity, and ethical considerations (An et al., 2025; McDonald et al., 2025). For technological universities, such guidance may be particularly valuable because students are preparing for professional environments in which AI competence will increasingly be relevant. Institutional regulation can therefore be understood not only as a mechanism for preventing academic misconduct but also as an educational strategy for developing responsible AI use.

Overall, the results support a view of AI integration in English language learning that balances **technological opportunity with academic responsibility**. The strong association between AI Literacy and Academic Integrity, together with the positive relationships involving Institutional Regulation, suggests that responsible AI use may be better supported when students possess the knowledge to evaluate AI and when institutions provide clear expectations. At the same time, the findings concerning AI Dependency indicate that greater attention should be given to maintaining learner autonomy and ensuring that AI functions as a support for language development rather than a substitute for students' cognitive and linguistic effort.

CONCLUSIONS

This study examined university students' perceptions of artificial intelligence use in English language learning through four dimensions: Academic Integrity, AI Literacy, AI Dependency, and Institutional Regulation. The findings indicate that students generally reported relatively high levels of AI Literacy and Academic Integrity, while perceived AI Dependency was comparatively lower.

The results also revealed significant relationships among the main dimensions of the study. AI Literacy was positively associated with Academic Integrity, while both AI Literacy and Academic Integrity were positively associated with Institutional Regulation. In contrast, AI Dependency showed a weak negative association with Academic Integrity. These findings suggest that students' ability to understand and critically evaluate AI may be relevant to how they perceive responsible academic use of these technologies.

Differences according to frequency of AI use were identified for AI Dependency and Institutional Regulation, but not for Academic Integrity or AI Literacy. This finding suggests that frequency of use alone does not necessarily reflect students' level of AI literacy or their perceptions of academic integrity. Rather, the quality and purpose of AI use may be more relevant considerations for educational practice.

From a practical perspective, the findings support the integration of AI literacy and academic integrity into English language education. Rather than focusing exclusively on restricting AI use, higher education institutions can provide students with clear guidelines and opportunities to develop the knowledge and critical skills necessary to use AI responsibly. In English language courses, this may involve teaching students to evaluate AI-generated content, verify information, critically assess language feedback, and maintain responsibility for their own academic work.

The study contributes empirical evidence from a technological university in Mexico and highlights the importance of considering AI literacy, academic integrity, dependency, and institutional regulation as interconnected dimensions of responsible AI integration. However, the cross-sectional design and reliance on self-reported data limit the possibility of establishing causal relationships. Future research could employ longitudinal designs, qualitative approaches, and larger samples across different institutions to further examine how students develop responsible AI practices in English language learning.

Ultimately, the responsible integration of artificial intelligence in English language education requires a balance between technological innovation, learner autonomy, academic integrity, and institutional guidance. AI should be positioned as a tool that supports learning while preserving students' active participation and responsibility in the learning process.

REFERENCES

An, Y., Yu, J. H., & James, S. (2025). Investigating the higher education institutions' guidelines and policies regarding the use of generative AI in teaching, learning, research, and administration. *International Journal of Educational Technology in Higher Education, 22*, 10. https://doi.org/10.1186/s41239-025-00507-3

Bittle, K., & El-Gayar, O. F. (2025). Generative AI and academic integrity in higher education: A systematic review and research agenda. *Information, 16*(4), 296. https://doi.org/10.3390/info16040296

Johnston, H., Wells, R. F., Shanks, E. M., Boey, T., & Parsons, B. N. (2024). Student perspectives on the use of generative artificial intelligence technologies in higher education. *International Journal for Educational Integrity, 20*, 2. https://doi.org/10.1007/s40979-024-00149-4

Lee, S., Choe, H., Zou, D., & Jeon, J. (2026). Generative AI (GenAI) in the language classroom: A systematic review. *Interactive Learning Environments, 34*(1), 335–359. https://doi.org/10.1080/10494820.2025.2498537

Li, B., Lowell, V. L., Wang, C., & Li, X. (2024). A systematic review of the first year of publications on ChatGPT and language education: Examining research on ChatGPT's use in language learning and teaching. *Computers and Education: Artificial Intelligence, 7*, 100266. https://doi.org/10.1016/j.caeai.2024.100266

Li, Y., Shadiev, R., & Chiu, T. K. F. (2026). Applying generative artificial intelligence to task-based language teaching and learning: A systematic review and meta-analysis. *TechTrends, 70*, 150–163. https://doi.org/10.1007/s11528-025-01140-7

Li, Y., Zhou, X., Yin, H. B., & Chiu, T. K. F. (2025). Design language learning with artificial intelligence (AI) chatbots based on activity theory from a systematic review. *Smart Learning Environments, 12*, 24. https://doi.org/10.1186/s40561-025-00379-0

Lintner, T. (2024). A systematic review of AI literacy scales. *npj Science of Learning, 9*, 50. https://doi.org/10.1038/s41539-024-00264-4

Liu, J., Sihes, A. J. B., & Lu, Y. (2025). How do generative artificial intelligence (AI) tools and large language models (LLMs) influence language learners' critical thinking in EFL education? A

systematic review. *Smart Learning Environments, 12*, 48. https://doi.org/10.1186/s40561-025-00406-0

McDonald, N., Johri, A., Ali, A., & Hingle, A. (2025). Generative artificial intelligence in higher education: Evidence from an analysis of institutional policies and guidelines. *Computers in Human Behavior: Artificial Humans, 3*, 100121. https://doi.org/10.1016/j.chbah.2025.100121

Ng, D. T. K., Wu, W., Leung, J. K. L., Chiu, T. K. F., & Chu, S. K. W. (2024). Design and validation of the AI literacy questionnaire: The affective, behavioural, cognitive and ethical approach. *British Journal of Educational Technology, 55*(3), 1082–1104. https://doi.org/10.1111/bjet.13411

Wang, F., Li, N., Cheung, A. C. K., & Wong, G. K. W. (2025). In GenAI we trust: An investigation of university students' reliance on and resistance to generative AI in language learning. *International Journal of Educational Technology in Higher Education, 22*, 59. https://doi.org/10.1186/s41239-025-00547-9

Mahapatra, S. (2024). Impact of ChatGPT on ESL students' academic writing skills: A mixed methods intervention study. *Smart Learning Environments, 11*, 9. https://doi.org/10.1186/s40561-024-00295-9

Almusharraf, A., Mohammad, I. S., Bailey, D., Almusharraf, N., & Alotaibi, T. (2025). Students' perceptions of generative AI in EFL writing: Strategies, self-efficacy, satisfaction and behavioural intention. *Australasian Journal of Educational Technology*. https://doi.org/10.14742/ajet.10045

Oda, M., Saito, R., & Horita, T. (2025). Exploring EFL learners' perceptions of generative AI through the Technology Acceptance Model: Insights from an AI literacy program. In *Proceedings of the International Conference on Computers in Education*. https://doi.org/10.58459/icce.2025.5998