



Percepciones de los estudiantes de inglés como lengua extranjera sobre las herramientas de IA en el desarrollo de las habilidades de escritura en inglés en el bachillerato ecuatoriano

EFL students' perceptions of AI tools in the development of English writing skills in ecuadorian baccalaureate

Percepções de alunos de inglês como língua estrangeira sobre ferramentas de IA no desenvolvimento de habilidades de escrita em inglês no ensino médio equatoriano

Madeleine Nicole Moya-Zúñiga ^I

mmoyaz@unemi.edu.ec

<https://orcid.org/0000-0003-0217-674X>

Ninfa Sofía Guevara-Peñaranda ^{II}

nguevarap@unemi.edu.ec

<https://orcid.org/0000-0001-6638-8851>

Correspondencia: mmoyaz@unemi.edu.ec

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- I. Universidad Estatal de Milagro, Milagro, Guayas, Ecuador, Unidad Educativa San Juan de Bucay, Ecuador.
- II. Universidad Estatal de Milagro, Milagro, Guayas, Ecuador.

Resumen

Esta investigación tuvo como objetivo analizar las percepciones de los estudiantes ecuatorianos de bachillerato (EFL) sobre la utilidad de las herramientas de inteligencia artificial (IA) para el desarrollo de sus habilidades de escritura en inglés. El estudio empleó un diseño de investigación descriptivo y cuantitativo, encuestó a 62 estudiantes entre 15 y 17 años en Bucay, Guayas, Ecuador. Los resultados indican una percepción generalmente positiva de las herramientas de IA en varios aspectos de la escritura: beneficios para corregir ortografía (58,0% de acuerdo/muy de acuerdo), mejorar estilo/claridad (58,1% de acuerdo/muy de acuerdo) y organizar ideas (62,9% de acuerdo/muy de acuerdo). El 53,2% encontró útiles las sugerencias de IA. Si bien hubo una percepción mixta sobre el aumento de la confianza en la ortografía debido al uso de la IA (43,5% neutral, 38,7% con mayor confianza), los hallazgos sugieren que, aunque las herramientas de IA son útiles para la corrección inmediata y las mejoras estilísticas, su impacto percibido en la comprensión gramatical profunda, la expansión del vocabulario o la fluidez general de la escritura es menos pronunciado. Esto resalta la necesidad de enfoques pedagógicos que integren las herramientas de IA para fomentar una comprensión más profunda de los principios lingüísticos y una producción de lenguaje más natural, contribuyendo así a la mejora de la instrucción de la escritura y la competencia comunicativa de los estudiantes.

Palabras claves: herramientas IA; habilidades de escritura; percepciones.

Abstract

This research aimed to analyze Ecuadorian high school (EFL) students' perceptions of the usefulness of artificial intelligence (AI) tools for developing their English writing skills. The study employed a descriptive and quantitative research design, surveying 62 students between the ages of 15 and 17 in Bucay, Guayas, Ecuador. The results indicate a generally positive perception of AI tools in several aspects of writing: benefits for correcting spelling (58.0% agree/strongly agree), improving style/clarity (58.1% agree/strongly agree), and organizing ideas (62.9% agree/strongly agree). 53.2% found AI suggestions useful. While there was a mixed perception about increased confidence in spelling due to the use of AI (43.5% neutral, 38.7% more confident), the findings suggest that while AI tools are useful for immediate correction and stylistic improvements, their perceived impact on deep grammatical understanding, vocabulary expansion, or overall writing

fluency is less pronounced. This highlights the need for pedagogical approaches that integrate AI tools to foster a deeper understanding of linguistic principles and more natural language production, thereby contributing to improved writing instruction and students' communicative competence.

Keywords: AI tools; writing skills; perceptions.

Resumo

Esta pesquisa teve como objetivo analisar as percepções de estudantes equatorianos do ensino médio (EFL) sobre a utilidade de ferramentas de inteligência artificial (IA) para o desenvolvimento de suas habilidades de escrita em inglês. O estudo empregou um delineamento de pesquisa descritivo e quantitativo, entrevistando 62 estudantes entre 15 e 17 anos em Bucay, Guayas, Equador. Os resultados indicam uma percepção geralmente positiva das ferramentas de IA em vários aspectos da escrita: benefícios para correção ortográfica (58,0% concordam/concordam totalmente), melhoria do estilo/clareza (58,1% concordam/concordam totalmente) e organização de ideias (62,9% concordam/concordam totalmente). 53,2% acharam as sugestões de IA úteis. Embora tenha havido uma percepção mista sobre o aumento da confiança na ortografia devido ao uso de IA (43,5% neutros, 38,7% mais confiantes), as descobertas sugerem que, embora as ferramentas de IA sejam úteis para correção imediata e melhorias estilísticas, seu impacto percebido na compreensão gramatical profunda, expansão do vocabulário ou fluência geral na escrita é menos pronunciado. Isso destaca a necessidade de abordagens pedagógicas que integrem ferramentas de IA para promover uma compreensão mais profunda dos princípios linguísticos e uma produção de linguagem mais natural, contribuindo assim para a melhoria do ensino da escrita e da competência comunicativa dos alunos.

Palavras-chave: ferramentas de IA; habilidades de escrita; percepções.

Introduction

The multifaceted landscape of Teaching English as a Foreign Language (EFL) is constituted by a complex interplay of pedagogical methodologies, principles, and practices, all contributing to the holistic development of language learners. Within this particular EFL context, teachers are forever exploring through cultural mosaic, feeding the intrinsic ember of motivation, strategically implementing reward systems and mapping out a richly empathic comprehension of the journey taken by our language learners' interlanguage development – all towards the delivery of effective

feedback, which in turn will form the very legitimate foundation for strong communicative competence (Brown, 2000).

Equivalent, just as successful EFL pedagogy depends on our understanding of our learners' "complex and individual paths," an exploration of AI also needs to account for the nuanced nature of its effect on the multi-faceted skill of writing – a skill that, like its mothering capacity of communicative competence, is shaped by not only speaking, reading, and writing correctly, but also constructing coherent text, sophisticated structures, and a plethora of ideas (Hyland, 2003).

Therefore, this academic inquiry aims to map these interconnected threads by scrutinizing EFL learners' perceptions of AI tools in the development of their L2 writing proficiency, with due consideration given to both the potential benefits and inherent challenges entailed by their integration within our specific educational context. Drawing on the myriad insights provided by previous scholarship and critically examining the real-world consequences of integrating AI into pedagogical practices, this paper seeks to add substantively to the field, providing useful perspectives for like-minded colleagues in EFL instruction and research whom are dedicated to making the most of technological innovation towards improving writing instruction and most importantly, students' ability to communicate confidently and effectively.

Literature Review

Reflecting the interest in understanding Ecuadorian English learners, a relevant body of recent academic work has investigated the potential of AI tools to foster EFL learners' writing skills. This endeavor mirrors established pedagogical approaches to feedback. At one end of this spectrum lie sophisticated Automated Writing Evaluation (AWE) systems, which provide immediate feedback mirroring in-class error correction offered by teachers (Lee, 2023). At the other end encompasses ubiquitous grammar and spell-checkers that facilitate accuracy, alongside emerging AI-infused writing assistants designed to support both idea generation and textual composition (Chen & Zhou, 2024).

These studies collectively lay the groundwork by identifying the diverse range of AI tools available to EFL learners. For our research on Ecuadorian baccalaureate students' perceptions, understanding these categories is crucial, as their perceptions will likely differ based on the specific type of AI tool they interact with. Furthermore, Sun (2022) highlights the inherent opportunities and challenges of integrating AI into L2 writing assessment, which directly informs our inquiry by

setting the stage for anticipated positive and negative perceptions among our student population regarding how these tools might impact their assessed writing skills.

While existing studies, such as those reviewed by Lee (2023) and Chen & Zhou (2024), underscore the potential of Automated Writing Evaluation (AWE) systems in providing beneficial feedback for EFL learners, their foci diverge in terms of the specific writing aspects examined and the nature of the feedback provided. A systematic review by Liu (2024) synthesizes findings on AWE feedback, noting its documented effects on various writing aspects, including elements related to higher-order skills like essay organization and argumentation, while also discussing validity and student engagement. This breadth of documented effects on both macro and micro-level writing skills is highly pertinent to our research, as it provides a comparative baseline: the present study took into consideration whether Ecuadorian baccalaureate students perceive these same benefits and how their engagement with AWE systems influences their overall perception of writing skill development.

Beyond automated scoring and feedback, AI-driven grammar and spell-checking tools, now integral to the increasingly digitized landscape of language education (Pegrum, Hockly, & Dudeney, 2022). These technological aids offer immediate, rule-based error detection, thereby contributing to greater accuracy and fluency. However, their contributions distinctly complement or diverge from the nuanced, context-specific, and often motivational feedback characteristics of human instructors. This distinction is vital for the present study, as it aims to capture students' perceptions of these differences and preferences. Moreover, within this broader digital integration, AI-based vocabulary support is also proving instrumental in expanding learners' lexical repertoire and fostering the use of more complex linguistic structures in their written output (Zhang & Cui, 2021).

Sun and Wang's (2023) systematic review provides a comprehensive overview of the positive role of AI writing tools in fostering EFL learners' writing competence, reinforcing the general beneficial claims that may influence student perceptions. Moreover, more recent research, like that by Crompton and Burke (2024), has begun to consider the various functions AI writing tools might play in the fullest sense of the writing process, from ideation and outlining to drafting and revision. This detailed breakdown of AI functionality across the writing process allows our research to probe student perceptions not just of final product improvement, but of how AI assists them throughout the entire writing journey. The broader context of digital engagement in language teaching and

learning in the global age, as discussed by Weinmann, Neilsen, and Benalcázar (2024), further emphasizes the contemporary relevance of understanding student perceptions in this increasingly digital learning environment.

However, the integration of AI tools into EFL writing instruction is not without its complexities (Holmes, 2020). Beyond concerns regarding over-reliance on technology and the continued necessity of cultivating higher-order thinking skills (Lai & Zhao, 2022), significant ethical considerations arise, particularly concerning the potential for students to submit AI-generated content as their own work, thereby raising issues of academic integrity and the authentic demonstration of their language proficiency (Bretag et al., 2023). These ethical concerns, also addressed by Floridi et al. (2020) in their broader ethical framework for AI in society, are crucial for our study as they represent potential negative perceptions or anxieties among students that could impact their willingness to use AI tools or their trust in the development of their genuine writing skills. Furthermore, the functional applicability of these technologies, much like any pedagogical modality, is further determined by the specific tool selected, the diverse proficiency spectra exhibited by the students, and the prevailing pedagogical frameworks.

From the educators' side, Zheng and Li (2024) explore teachers' perspectives on integrating AI in EFL writing instruction, highlighting specific challenges and strategies; this contrasts with the student perspective this investigation seeks, allowing for potential insights into gaps between teacher intentions and student experiences. Finally, specific studies like Vo Xuan Hoa and Nguyen Hai Khoa's (2024) investigation into English-majored students' perceptions of using ChatGPT in English writing provides a direct comparative case study for our research, allowing us to see if similar perceptions, both positive and negative, exist among Ecuadorian baccalaureate students regarding this widely used AI tool. While not directly about AI, Kurniasih et al. (2023) shed light on EFL university students' perceptions of teachers' strategies to alleviate writing anxiety, which is indirectly relevant as student perceptions of AI tools could similarly impact their writing anxiety, a factor that can be considered in the present study.

To sum up, the literature review indicates that AI tools offer the potential to promote the writing abilities of our EFL learners, including (1) providing automatic feedback, (2) improving linguistic accuracy, (3) extending the vocabulary, and (4) supplying useful writing assistance. These established benefits form the backdrop against which will be analyzed in Ecuadorian students' perceptions. Reflecting established EFL approaches that emphasize the importance of timely

feedback and error correction for language development, teachers must ensure the integration sensibly and strategically to optimize the benefits; and carefully consider and address any potential pitfalls. Our study aims to augment this burgeoning area of inquiry by furnishing a detailed investigation into the discrete influences of artificial intelligence instruments on the holistic advancement of EFL written production, specifically from the perspective of Ecuadorian baccalaureate students. By examining their perceptions, this study seeks to understand how these documented affordances and challenges of AI play out in a specific local context, contributing to enabling students to realize comprehensive communicative competence, a fundamental aspiration within contemporary language pedagogy.

Methodology

This study employed a descriptive, quantitative research design to investigate the perceived influence of Artificial Intelligence (AI) tools on the development of writing skills among baccalaureate English as a Foreign Language (EFL) students. The information was obtained by surveys of 62 baccalaureate EFL students at Bucay, Guayas, Ecuador.

Participants

The participants in this study were 62 baccalaureate EFL students, aged between 15-17, enrolled in the second year and third year of a private high school in Bucay. The participants were selected using convenience sampling due to accessibility. All participants had experience learning the English language and different proficiency of digital tools. Consent of the students was voluntary and required before being included in this study.

Instrument

The validity of the closed-ended questionnaire, developed by the researcher and served as the primary instrument for data collection (see Appendix A), was empirically assessed through a pilot study involving (n=5) EFL baccalaureate students. The questionnaire consisted of two main sections:

- 1. Demographic Information:** This section gathered data on the students' age, gender, prior experience with technology in language learning, and frequency of using AI tools for writing-related tasks.
- 2. Perceived Influence of AI Tools on Writing Skills:** This section comprised a series of statements, rated on a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree),

designed to elicit the students' perceptions regarding the influence of AI tools on various aspects of their writing skills. These aspects were examined within five dimensions:

- a. Grammar and mechanics (Items 06, 07, 08)
- b. Vocabulary and style (Items 10, 11, 12, 13)
- c. Organization and coherence (Items 14, 15)
- d. Idea generation and development (Items 16, 17, 19)
- e. Overall writing confidence (Items 09, 18, 20)

The questionnaire was piloted with a small group of EFL students ($n=5$) with similar characteristics to the target sample to ensure clarity, comprehensibility, and internal consistency of the items. Based on the pilot study feedback, minor revisions were made to the wording of certain items to enhance clarity.

Procedure

The questionnaire was distributed to the 62 participating baccalaureate EFL students through a digital Google Form. Before the administration, the researcher informed them about the study goals and guaranteed that children would remain anonymous and responses would be confidential; clear instructions for filling out the questionnaire were given. Students had approximately 15 minutes to survey access. The filled-out questionnaire was then taken up at once.

Data Analysis

The data collected was analysed in a descriptive and inferential statistical approach through SPSS 25 version.

1. Descriptive Statistics: Frequencies, percentages, median and mode were calculated to summarize the demographic characteristics of the participants and their perceptions regarding the influence of AI tools on their writing skills for each item on the Likert scale. Responses among Bucay baccalaureate EFL learners were not solely treated as characteristics of the studied cohort. Instead, these descriptive metrics served as a basis for cautious generalization towards the broader population of Ecuadorian EFL students, acknowledging the inherent limitations of sample-based inference.

2. Inferential Statistics: The present study integrated a comparative analysis, situating the identified response patterns within the existing body of scholarly work on similar populations and contexts. This comparative approach aimed to discern potential convergences or divergences, thereby contributing to a more nuanced understanding of the

This study adhered to ethical principles for research involving human participants. The researcher guarantees the voluntariness of the participation, and the anonymity and confidentiality of the data, as well as the contribution of the participants only to obtain and to use the data for this study. The consent from all participants was informed and written, with the information regarding the objectives and the implications of the research regarding the application and the voluntary decision to participate. Participants were told that they had the right to drop out of the experiment at any time with no consequences. The information obtained was carefully maintained for this study.

To facilitate a comprehensive understanding of the principal findings, Likert scale items were classified according to their designated dimensions. Consequently, a strategic selection of one item per dimension was made to exemplify and elucidate the overarching trends.

		8. AI tools help me find them correct spelling of words.	9. Using AI tools has increased my confidence in my spelling abilities.	12. AI tools help me improve the style and clarity of my sentences.	14. AI tools help organize my tools ideas more effectively in my writing.	19. The suggestions provided by AI tools are usually helpful for improving my writing.
N	Valid	62	62	62	62	62
	Missing	0	0	0	0	0
Median		4,00	3,00	4,00	4,00	4,00
Mode		3 ^a	3	5	4	4

This table presents the results of a survey, likely using a Likert scale, where respondents (N=62 for all items) were asked about their perceptions of how AI tools affect their writing. The table shows the median and mode for five different statements (numbered 8, 9, 12, 14, and 19).

In Item 08 the median response of 4 suggests that the typical respondent *agrees* with this statement. The mode of 3 indicates that the most frequent response was also *agree*. This suggests a general consensus that AI tools are helpful for spelling correction.

In Item 09 the median of 3 indicates a neutral stance or slight agreement ("Neither agree nor disagree" or "Agree" depending on the scale). The mode of 3 reinforces this tendency towards a neutral to slightly positive impact on confidence in spelling abilities.

Meanwhile, item 12 presents a median of 4 that suggests the typical respondent *agrees* that AI tools help improve sentence style and clarity. The mode of 5, indicating the most frequent response was *strongly agree*, further emphasizes a positive perception of AI's role in this aspect of writing.

Item 14 with a median of 4 and a mode of 4, the data strongly suggests that respondents generally *agree* that AI tools assist them in organizing their ideas more effectively in their writing.

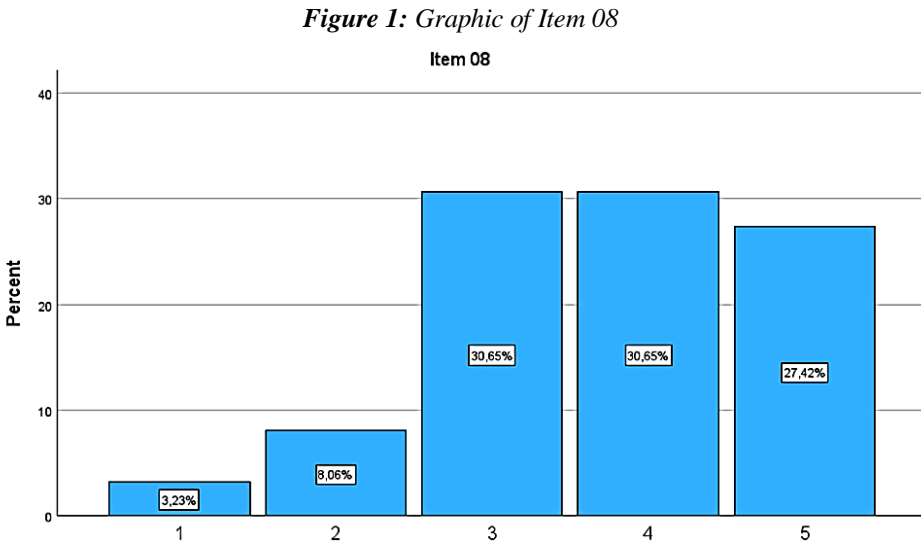
And finally item 19, similar to item 14, shows a median of 4 and a mode of 4 indicate a general *agreement* among respondents that the suggestions provided by AI tools are typically helpful for improving their overall writing.

Grammar and mechanics

The participants addressed of this study perceived that AI tools are more useful to correct spelling errors rather than grammatical errors in their writings nor understand grammatical rules. Probably this occurs due to a lack of guidance during the implementation of AI tools without the supervision of a teacher, taking into account that technology is mostly used by students at home.

Table 2: Item 08. AI tools help me find the correct spelling of words

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	2	3,2	3,2	3,2
	2	5	8,1	8,1	11,3
	3	19	30,6	30,6	41,9
	4	19	30,6	30,6	72,6
	5	17	27,4	27,4	100,0
Total		62	100,0	100,0	



Source: Elaborated by Madeleine Moya, Ninfa Guevara (2025)

As shown in Table 2 and further illustrated in Figure 1, the distribution of responses indicates a generally positive perception regarding the utility of AI tools for spelling correction. A notable proportion of respondents (30.6%) selected "3" (Neutral), suggesting a significant segment who neither strongly agree nor disagree. However, the combined percentage of participants who indicated agreement ("4" = Agree) or strong agreement ("5" = Strongly Agree) is substantial, totaling 58.0% (30.6% + 27.4%). Conversely, a smaller combined percentage of participants expressed disagreement or strong disagreement ("1" = Strongly Disagree, "2" = Disagree), accounting for 11.3% (3.2% + 8.1%) of the responses. This suggests that while there is some neutrality, a majority of the surveyed population perceives AI tools as beneficial for spelling.

Vocabulary and style

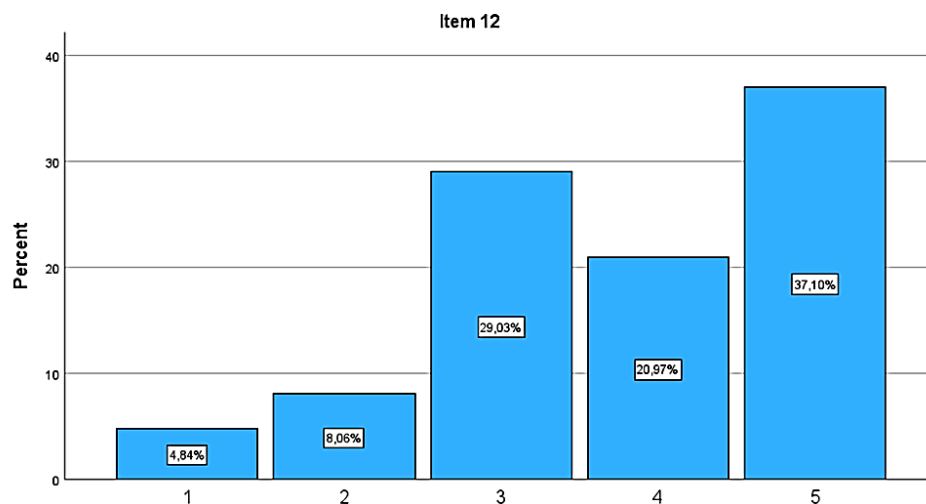
Baccalaureate students consider that AI tools help them improve the style and clarity of their sentences rather than expanding their vocabulary or enhancing their fluency.

Table 3: Item 12. AI tools help me improve the style and clarity of my sentences

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	3	4,8	4,8	4,8
	2	5	8,1	8,1	12,9
	3	18	29,0	29,0	41,9

4	13	21,0	21,0	62,9
5	23	37,1	37,1	100,0
Total	62	100,0	100,0	

Figure 2: Graphic of Item 12



Source: Elaborated by Madeleine Moya, Ninfa Guevara (2025)

As detailed in Table 3 and visually represented in Figure 2, the data reveal a strong positive perception regarding the ability of AI tools to enhance sentence style and clarity. The largest single group of respondents, 37.1%, strongly agreed ("5") with the statement. When combining those who agreed ("4") and strongly agreed ("5"), a substantial majority of 58.1% (21.0% + 37.1%) of participants affirmed the helpfulness of AI tools in this regard. A notable portion (29.0%) selected "3" (Neutral), indicating some participants had a neutral stance. Conversely, a smaller combined proportion of 12.9% (4.8% + 8.1%) expressed disagreement or strong disagreement ("1" or "2"). These findings suggest that a significant majority of the surveyed population recognizes the value of AI tools for refining writing style and improving sentence clarity.

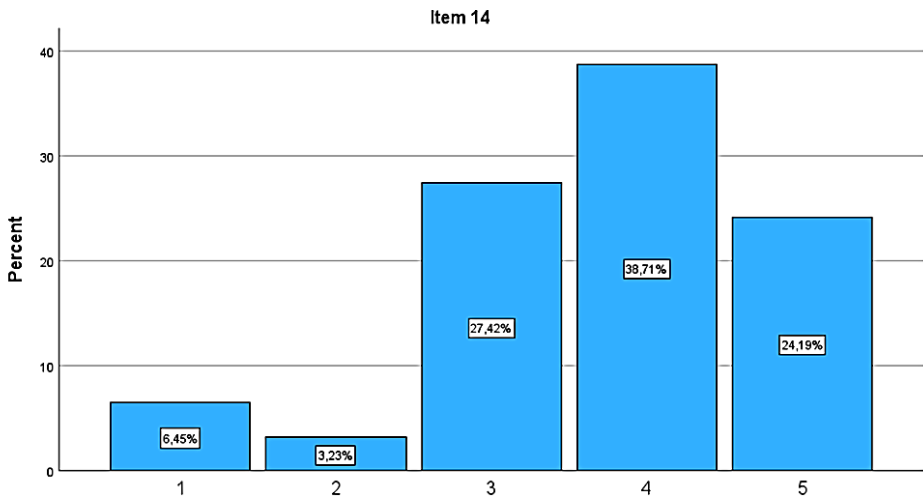
Organization and coherence

Statistically speaking there is not much difference between the results of item 14: *AI tools help me organize my ideas more effectively in my writing.* and item 15: *Using AI tools has improved the overall coherence of my written work.* Both of them show a clear trend that participants achieve a better organization and coherence within the use of AI tools for the writing process.

Table 4: Item 14. AI tools help me organize my ideas more effectively in my writing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	4	6,5	6,5	6,5
	2	2	3,2	3,2	9,7
	3	17	27,4	27,4	37,1
	4	24	38,7	38,7	75,8
	5	15	24,2	24,2	100,0
	Total	62	100,0	100,0	

Figure 3: Graphic of Item 14



Source: Elaborated by Madeleine Moya, Ninfa Guevara (2025)

As indicated in Table 4 and depicted in Figure 3, the data demonstrate a predominantly positive perception among participants regarding the role of AI tools in organizing ideas within writing. The largest proportion of respondents, 38.7%, selected "4" (Agree), indicating a strong belief in this utility. Combined, those who agreed ("4") or strongly agreed ("5") constitute a significant majority of 62.9% (38.7% + 24.2%). A substantial segment (27.4%) maintained a neutral stance ("3"). Conversely, a smaller group of 9.7% (6.5% + 3.2%) expressed disagreement or strong disagreement ("1" or "2"). These findings suggest that AI tools are widely perceived as valuable aids for enhancing the effectiveness of idea organization in written communication.

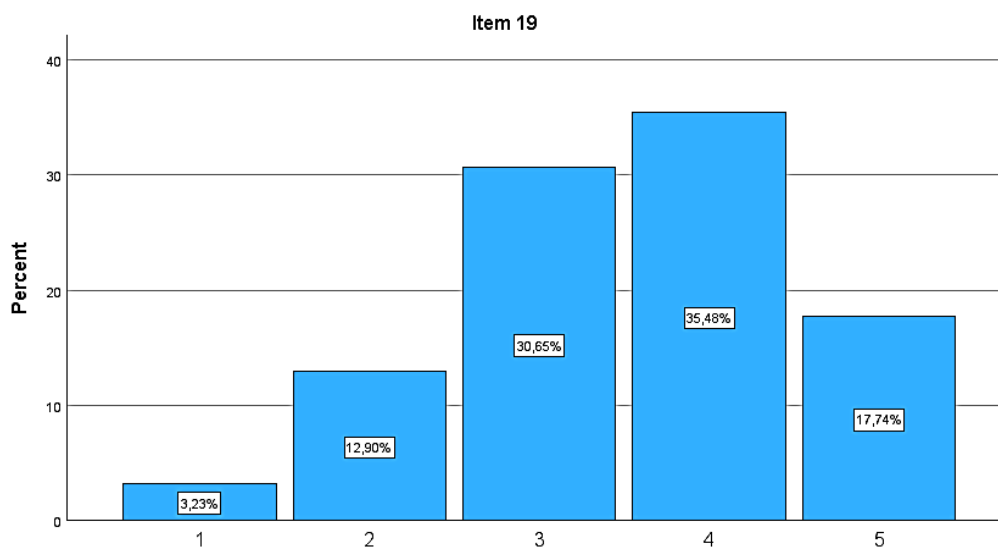
Idea generation and development

According to this research, learners consider AI tools more useful because of its suggestions to improve their writing rather than helping them with the generation of new ideas or making the writing process easier.

Table 5: Item 19. The suggestions provided by AI tools are usually helpful for improving my writing

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	2	3,2	3,2	3,2
	2	8	12,9	12,9	16,1
	3	19	30,6	30,6	46,8
	4	22	35,5	35,5	82,3
	5	11	17,7	17,7	100,0
	Total	62	100,0	100,0	

Figure 4: Graphic of Item 19



Source: Elaborated by Madeleine Moya, Ninfa Guevara (2025)

As presented in Table 5 and visually represented in Figure 4, the responses indicate a strong positive sentiment regarding the helpfulness of AI tool suggestions for writing improvement. A significant majority of participants, 53.2% (35.5% who Agreed and 17.7% who Strongly Agreed),

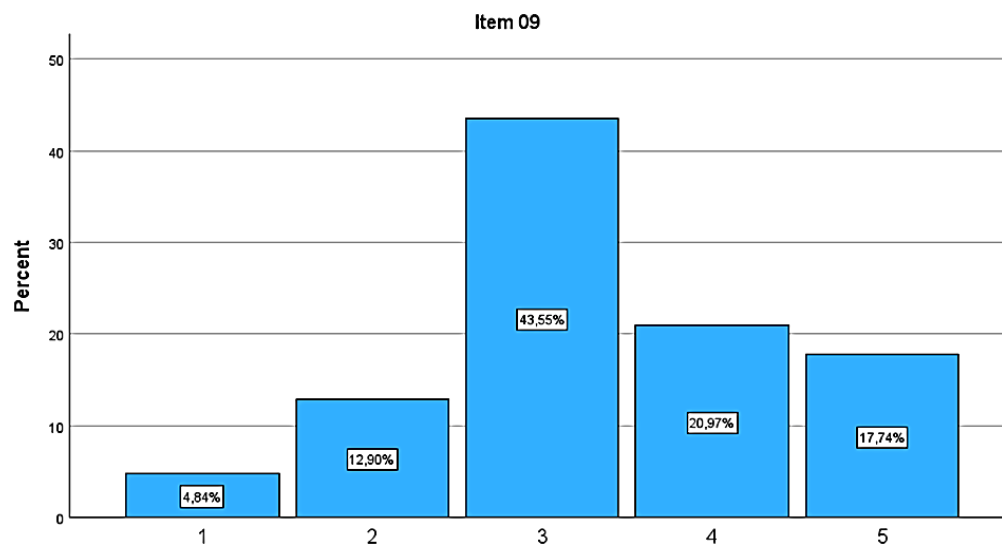
perceive AI suggestions as beneficial. The largest single group (35.5%) selected "4" (Agree), while a substantial portion (30.6%) held a neutral stance ("3"). Conversely, 16.1% (3.2% who Strongly Disagreed and 12.9% who Disagreed) expressed skepticism about the helpfulness of these suggestions. These findings suggest that while there is some variance, most participants find AI-generated suggestions useful for enhancing their writing.

Overall writing confidence

Statistically speaking there is not much difference between the results of item 09: *Using AI tools has increased my confidence in my spelling abilities*, item 18: *I feel more confident in my overall English writing skills because of using AI tools*, item 20: *I rely too much on AI tools when I write in English*. Nevertheless, results of Item 09 are slightly more favorable by 1% of tendency to strongly agree. This means that most of the students believe that AI tools have increased their confidence in spelling abilities.

Table 6: Item 09. *Using AI tools has increased my confidence in my spelling abilities*

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	3	4,8	4,8	4,8
	2	8	12,9	12,9	17,7
	3	27	43,5	43,5	61,3
	4	13	21,0	21,0	82,3
	5	11	17,7	17,7	100,0
Total		62	100,0	100,0	

Figure 5: Graphic of Item 09

Source: Elaborated by Madeleine Moya, Ninfa Guevara (2025)

As detailed in Table 6 and visually represented in Figure 5, the responses indicate a mixed but generally neutral to positive impact of AI tools on participants' spelling confidence. The largest single group of respondents, 43.5%, selected "3" (Neutral), suggesting that a substantial portion of the population did not perceive a strong increase or decrease in confidence due to AI tool usage. However, a notable segment expressed increased confidence, with 21.0% agreeing ("4") and 17.7% strongly agreeing ("5"), totaling 38.7% for positive responses. Conversely, 17.7% (4.8% strongly disagreed and 12.9% disagreed) indicated that AI tools had not increased their confidence. These findings suggest that while AI tools are not universally perceived as confidence boosters for spelling, a significant minority experience such an effect, while a larger group remains neutral.

Discussion

The current study investigated Ecuadorian baccalaureate EFL students' perceptions of AI tools in developing their English writing skills, providing insights into a local context that complements existing international scholarship. The findings suggest a generally positive perception of AI tools, particularly concerning grammar and mechanics, vocabulary and style, organization and coherence, and the helpfulness of AI suggestions for overall writing improvement.

Regarding grammar and mechanics, the results indicated that students perceive AI tools as beneficial for correcting spelling errors, with 58.0% agreeing or strongly agreeing that AI tools

help them find correct spellings. However, the perception of AI tools being useful for understanding grammatical rules was less pronounced. This finding aligns with the documented potential of Automated Writing Evaluation (AWE) systems to provide immediate feedback, mirroring in-class error correction offered by teachers. While Lee (2023) and Chen & Zhou (2024) underscore the potential of AWE systems, the present study's nuanced finding suggests that while superficial error correction is perceived as helpful, deeper grammatical understanding might require more guided integration of these tools. Similarly, ubiquitous grammar and spell-checkers facilitate accuracy, and the results support this, though perhaps highlight a need for pedagogical intervention to move beyond mere correction to conceptual understanding.

In terms of vocabulary and style, a strong positive perception was observed, with 58.1% of participants agreeing or strongly agreeing that AI tools help improve sentence style and clarity. This aligns with research indicating that AI-based vocabulary support can expand learners' lexical repertoire and foster the use of more complex linguistic structures. Zhang and Cui (2021) specifically highlighted the effects of AI-powered vocabulary tools on lexical development and writing complexity. The findings also resonate with Sun and Wang's (2023) systematic review, which provides a comprehensive overview of the positive role of AI writing tools in fostering EFL learners' writing competence, reinforcing general beneficial claims that may influence student perceptions. However, students perceived less benefit in expanding their vocabulary or enhancing fluency.

For organization and coherence, the study found a predominantly positive perception, with 62.9% agreeing or strongly agreeing that AI tools assist them in organizing ideas more effectively. This suggests that AI tools are widely perceived as valuable aids for enhancing the effectiveness of idea organization in written communication. This outcome aligns with the broader understanding that AI writing tools can play various functions across the writing process, from ideation and outlining to drafting and revision, as explored by Crompton and Burke (2024). The perception that AI suggestions are generally helpful for improving writing was also strong, with 53.2% of participants agreeing or strongly agreeing, further supporting the role of AI in guiding the writing journey beyond just the final product.

Regarding overall writing confidence, the responses indicated a mixed but generally neutral to positive impact of AI tools on participants' spelling confidence, with 43.5% remaining neutral, while 38.7% expressed increased confidence. This suggests that while AI tools are not universally

perceived as confidence boosters for spelling, a significant minority experience such an effect. The concept of writing anxiety, as explored by Kurniasih et al. (2023) in the context of teacher strategies, could be indirectly relevant here, as student perceptions of AI tools might similarly influence their writing anxiety. Furthermore, the study's findings on Ecuadorian baccalaureate students' perceptions can be compared to other specific case studies, such as Vo Xuan Hoa and Nguyen Hai Khoa's (2024) investigation into English-majored students' perceptions of using ChatGPT in English writing, to identify similar positive and negative perceptions regarding widely used AI tools.

The ethical considerations and potential challenges associated with AI integration, such as over-reliance on technology and academic integrity concerns (Bretag et al., 2023; Floridi et al., 2020; Holmes, 2020; Lai & Zhao, 2022), were acknowledged in the literature review. While the current study primarily focused on student perceptions of benefits, these inherent challenges represent potential negative perceptions or anxieties among students that could impact their willingness to use AI tools or their trust in the development of genuine writing skills. The findings, therefore, should be interpreted within this broader context, acknowledging that the integration of AI tools, like any pedagogical modality, is influenced by the specific tool, student proficiency, and prevailing pedagogical frameworks. The contrasting perspectives of teachers, as explored by Zheng and Li (2024), highlight potential gaps between teacher intentions and student experiences, underscoring the importance of understanding student perceptions.

Conclusions

The study's findings indicate that Ecuadorian baccalaureate EFL students generally hold positive perceptions regarding the utility of AI tools in developing their English writing skills. Specifically, students perceive AI tools as beneficial for correcting spelling errors, improving sentence style and clarity, and effectively organizing ideas. These perceptions align with broader research on the potential of AI tools to foster various aspects of EFL learners' writing competence.

However, the findings also suggest nuances in these perceptions. While AI tools are seen as helpful for immediate error correction and stylistic improvements, their perceived impact on deeper grammatical understanding, vocabulary expansion, or overall writing fluency is less pronounced. This highlights a potential need for pedagogical approaches that integrate AI tools in a way that

fosters not just superficial correction but also a deeper comprehension of linguistic principles and more natural language production.

Ultimately, this research contributes to the burgeoning area of inquiry into AI's influence on EFL writing. By examining the discrete influences of AI instruments from the perspective of Ecuadorian baccalaureate students, the study provides valuable insights for educators and researchers aiming to leverage technological innovation to enhance writing instruction and, most importantly, students' ability to communicate confidently and effectively, a fundamental aspiration within contemporary language pedagogy.

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