

**UNIVERSIDAD POLITÉCNICA ESTATAL DEL CARCHI**

**POSTGRADUATE CENTER**



**MASTER'S DEGREE IN PEDAGOGY OF NATIONAL AND FOREIGN  
LANGUAGES WITH A SPECIALIZATION IN ENGLISH TEACHING**

“Artificial Intelligence in Reinforcing English Language Writing among High School  
Students”

Thesis submitted in partial fulfilment of the requirements for the degree of Master in  
Pedagogy of National and Foreign Languages with a specialization in English Teaching

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Tulcán, November 2025

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This work is subject to the regulations and methodology set forth in the Regulations of the Postgraduate Degree Unit of the Universidad Politécnica Estatal del Carchi, under RESOLUTION No. 095-CSUP-2025; therefore, I authorize its submission for the respective defense.



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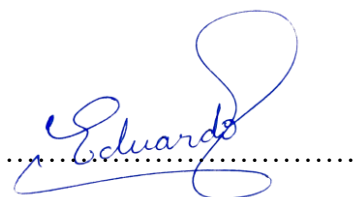
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## **ACKNOWLEDGEMENTS**

My sincere thanks to the Universidad Politécnica Estatal del Carchi, its administrators and faculty, for their vision and commitment in creating a master's programme in English language teaching focused on responding to the growing need to train skilled professionals in a globalised world. This initiative not only transforms lives but also enriches Ecuadorian education by strengthening those of us who work for a better future.

I would also like to thank the management, teachers and students of the Unidad Educativa Fiscomisional Santa Catalina Labouré for their generous openness in carrying out this research. Their trust and willingness to support this project reflect a deep interest in the well-being and learning of the educational community.

## **DEDICATION**

Dedicated to young people who dream of a better future and who, despite adversity, strive every day to better themselves. May they never lack the courage to move forward or the passion to achieve their goals.

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## ABSTRACT

In the field of teaching and learning English as a foreign language, the development of productive skills is a complex process that requires the assistance of new methods and strategies that integrate emerging technologies. For this reason, it is of great importance to understand how tools such as artificial intelligence (AI) can be used to improve the teaching of skills such as writing. However, in the Ecuadorian context, research proposing the use of AI to reinforce English language writing skills is limited, as the existing literature has focused specifically on the perceptions of the communicative community without a practical component. Therefore, the main objective of this research was to propose an AI-based activity guide to reinforce English language writing skills in high school students. To design the proposal, information was first obtained through the application of a test to diagnose writing as a process and as a product; then English teachers were interviewed to describe their digital competences with respect to AI. The analysis of results was carried out by means of a methodological triangulation to relate qualitative and quantitative data. The findings suggest that students have significant deficiencies in writing skills and that teachers have moderate competences, thus the activity guide proposed in this research seeks to take advantage of this knowledge to fill the existing gaps. The results also point to the fact that both students and teachers need to be trained in order to implement AI effectively and within an ethical and responsible framework.

**Keywords:** Artificial intelligence, AI, reinforcement, writing, English

## RESUMEN

En la enseñanza y aprendizaje del inglés como lengua extranjera, el desarrollo de las destrezas productivas es un proceso complejo que requiere la asistencia de nuevos métodos y estrategias que integren las tecnologías emergentes. Por esta razón, es de gran importancia comprender cómo se pueden utilizar herramientas como la inteligencia artificial (IA) para mejorar la enseñanza de destrezas como la escritura. Sin embargo, en el contexto ecuatoriano, las investigaciones que proponen el uso de la IA para reforzar la destreza de escritura del idioma inglés son limitadas, pues la literatura existente se ha enfocado específicamente en conocer las percepciones de la comunidad comunicativa sin un componente práctico. Por consiguiente, el objetivo principal de esta investigación fue proponer una guía de actividades basada en la IA para reforzar la destreza de escritura del idioma inglés en estudiantes de bachillerato. Para diseñar la propuesta, primero se obtuvo información mediante la aplicación de una prueba para diagnosticar la escritura como proceso y como producto; luego se entrevistó a los docentes de inglés para describir sus competencias digitales con respecto a la IA. El análisis de resultados se realizó mediante una triangulación metodológica para relacionar los datos cualitativos y cuantitativos. Los hallazgos sugieren que los estudiantes tienen falencias significativas en la destreza de escritura y que los docentes poseen competencias moderadas, por lo que la guía de actividades propuesta en esta investigación busca aprovechar este conocimiento para cubrir los vacíos existentes. Los resultados también apuntan a que tanto estudiantes como docentes deben recibir formación para que la implementación de la IA sea efectiva y se dé dentro de un marco ético y responsable.

**Palabras clave:** inteligencia artificial, IA, refuerzo, escritura, inglés

## CHAPTER I

### PROBLEM

#### 1.1. Problem Statement

Teaching English as a foreign language is a complex task because it requires students not only to memorize vocabulary and grammatical structures, but also to acquire and develop the skills necessary to communicate clearly and effectively to meet the demands of a society that is constantly moving towards globalization. In Latin America, there is a growing demand for professionals who are proficient in a foreign language, usually English, which makes it imperative for students to be proficient in this language with the aim of compete in the job market.

In Ecuador, the level of proficiency in English as a foreign language is considerably low. According to the global ranking EF English Proficiency Index, Ecuador ranks 82nd out of 116 countries worldwide and 19th out of 21 in Latin America, with a score of 465, which is in the low range (450-499) (EF Education First, 2024). The measures taken by the government to strengthen English language teaching have been ineffective, as it is evident that students complete their secondary education without having achieved optimal development of skills such as writing. It is common for students to be able to understand what they listen to and read; however, they are unable to communicate effectively, particularly in writing. This makes it difficult for young Bachillerato General Unificado (BGU) students and those who decide to continue their tertiary studies to opt for better opportunities in the workplace and academia, such as positions in international companies, scholarships or participation in exchange programs.

In rural areas of Ecuador, the situation is no different, as the same patterns of students who are skilled at memorizing extensive vocabulary lists and grammatical structures but fail when it comes to expressing their ideas or communicating effectively are evident. There are several causes for this, including the use of inappropriate teaching methodologies, limited resources, and little exposure to the language. Some causes even depend on the students themselves, as each one has specific needs that must be addressed. The combination of these factors results in students who are unable to use the language for communicative purposes. Therefore, it is up to the teacher to find the necessary methodology and resources to optimize their teaching and ensure that their students achieve the appropriate level of language proficiency and optimal development of skills

that enable them to communicate, considering the limitations and challenges they encounter in their context.

Consequently, this research aims to answer the question: How can artificial intelligence be integrated to reinforce English language writing skills in second-year BGU students at a state-supported private school located in the rural area of Checa, in the city of Quito, province of Pichincha?

## **1.2. Research Questions**

- What is the level of proficiency in English writing skills among second-year BGU students at the Unidad Educativa Fiscomisional Santa Catalina Labouré?
- What are the digital competencies of the English teachers at the Unidad Educativa Fiscomisional Santa Catalina Labouré with respect to the use of artificial intelligence?
- What would be the structure of the AI-based activity guide to reinforce English writing skills among second-year BGU students at the Unidad Educativa Fiscomisional Santa Catalina Labouré?

## **1.3. Research Objectives**

### ***General Objective***

Propose an AI-based activities guide to reinforce English writing skills in second-year BGU students at the Unidad Educativa Fiscomisional Santa Catalina Labouré.

### ***Specific Objectives***

- Diagnose the level of proficiency in English writing among second-year BGU students at the Unidad Educativa Fiscomisional Santa Catalina Labouré.
- Describe the digital competencies of the English teachers at the Unidad Educativa Fiscomisional Santa Catalina Labouré with respect to the use of artificial intelligence.
- Design an activity guide based on the use of artificial intelligence to reinforce English writing skills in second-year BGU students at the Unidad Educativa Fiscomisional Santa Catalina Labouré.

## **1.4. Justification**

This research represents an opportunity to address the low levels of English proficiency among high school students in an innovative way by exploring a topic that has received little attention in the Ecuadorian context. Certainly, research on educational technology

is booming, and all studies share the same purpose: to improve teaching and learning processes. However, in Ecuador, the implementation of technological resources in classrooms is still limited and even generates some resistance within educational communities, especially in rural areas (Morales-Zambrano, 2021), so there is an urgent need to conduct studies that take this reality into account. Consequently, this research will be useful, as it will provide a new perspective on how artificial intelligence can be integrated to reinforce English writing skills among high school students, taking into account potential limitations and challenges.

For Ecuadorian society, where English proficiency is generally low, this research is of paramount importance because it aims to improve the ability to produce language fluently, naturally, and spontaneously in a foreign language. For this reason, the direct beneficiaries include English as a Foreign Language (EFL) students, who could improve their learning; teachers, since they will be able to use the guide developed in this research to integrate artificial intelligence into their practice; educational institutions, as they could achieve better results in large-scale assessments or during certification processes; and communities, where young people will properly develop the skills necessary to access better job or academic opportunities.

In a more practical context, it is important to consider that many students use artificial intelligence to facilitate task completion, often committing acts of academic dishonesty. This is possible because detecting whether a piece of work was produced partially or entirely by AI is a very complex task (Álvarez-Bernat, 2023). Since, although technology has advanced enough to offer AI-generated text detectors, these are still not entirely accurate or reliable (Weber-Wulff et al., 2023). For this reason, this research aims to propose an Activity Guide for integrating this technological tool ethically and responsibly, with the purpose of strengthening the teaching process for teachers and the learning process for students.

At the theoretical level, this research will facilitate the understanding of theories related to artificial intelligence and the development of English writing skills by filling knowledge gaps and contributing to the formulation of new hypotheses about the implementation of artificial intelligence in teaching English as a foreign language. Furthermore, through the analysis of results and conclusions, information will be obtained that could lay the groundwork for future research in the areas of technology and educational innovation.

With regard to methodological utility, many of the studies on artificial intelligence in teaching English as a foreign language in Ecuador consist of literature reviews or qualitative reports without presenting data that can be measured quantitatively. On this matter, this research will offer a new perspective on how artificial intelligence can be integrated into the development of English writing skills by designing an activity guide that takes into account the areas students need to improve and teachers' digital competencies. This will enable more precise results and more accurate conclusions.

On the other hand, the access to and availability of free or low-cost artificial intelligence technologies make this research viable. Furthermore, as a topic of study of growing interest in the international academic community, there are some previous studies that will serve as a basis for developing this research in an Ecuadorian context. Additionally, the constant desire to improve education and the teaching of English as a foreign language persuades educational communities, leading school and college administrators to facilitate the development of studies in practical, collaborative, and authentic environments, so this research could be carried out without major limitations.

Finally, this research contributes to the Plan Nacional de Desarrollo 2024–2025 [National Development Plan], whose policy 2.2 is: “to promote quality education with an innovative, competency-based, inclusive, resilient, and participatory approach that strengthens cognitive, socio-emotional, communication, digital, and practical life skills [...]” (Secretaría Nacional de Planificación, 2024, p. 86). Consequently, this research aims to innovate English language teaching and reinforce writing skills, which is directly aligned with the research line of the Universidad Politécnica Estatal del Carchi (UPEC) [Carchi State Polytechnic University]: Pedagogy of the English Language.

## CHAPTER II

### THEORETICAL FOUNDATION

#### 2.1. Literature Review

At an international level, several studies have been conducted on the use of artificial intelligence (AI) applied to the teaching of different English language skills. Specifically, studies that have addressed the development of productive skills, such as writing, provide a theoretical and empirical framework for understanding how the integration of AI could have a significant impact on the teaching and learning of these skills.

In this context, Özçelik and Ekşi (2024) conducted a qualitative case study on how AI could serve as a learning assistant to improve writing skills in higher education students and to gather their opinions and suggestions regarding the use of this technological tool. The sample consisted of eleven students with a B1 level. For data collection, the authors constructed a two-week lesson plan focused on writing lessons. During each lesson, participants completed different writing activities and once completed and reviewed, the researchers provided guidelines for correcting the writings using the ChatGPT tool. Once the lesson plan was completed, the participants were interviewed. Qualitative analysis of the data led to the conclusion that students consider artificial intelligence to be a useful learning assistant that could help them improve their writing. However, the authors mention that, due to the sample size and the design of the lesson plan, it would be premature to generalize their results, so they suggest further research to validate and confirm these findings.

The results of the analyzed research are consistent with those of Mahapatra (2024), who conducted a mixed study on how the artificial intelligence tool ChatGPT can contribute to the feedback process for writing activities in English as a foreign language. In addition, he sought to determine how students perceive this technological tool. For the first phase of data collection, students were given different writing tests. The writings were evaluated using a rubric. For the next phase, participants were trained in the use of ChatGPT to evaluate their own writings and those of their peers. Once the evaluation and feedback were completed, both groups underwent a post-test to obtain quantitative data. In the last phase, five students from the experimental group participated in a focus group to obtain qualitative data. The most relevant results indicate that the use of ChatGPT for feedback purposes is positive, as there was a significant improvement in the post-test results. In

addition, the students demonstrated a positive attitude towards the integration of artificial intelligence. The author emphasizes that his research focused specifically on academic writing, so other genres of writing need to be studied.

In addition, Utami et al. (2023) conducted a case study to map students' perceptions of AI, specifically in the use of two intelligent writing assistants. The first is a writing software program that allows users to generate ideas and rewrite texts. The second assists in rapid writing by providing prompts. The research was conducted in three secondary schools with 58 students, using purposive sampling. Data were collected through questionnaires and interviews, revealing that students have a largely positive perception of the usefulness and ease of use of AI in writing. In addition, students mentioned the need to improve the features of AI assistants and increase AI literacy. Consequently, the authors concluded that the use of AI has ultimately contributed to the academic writing process, suggesting that this tool be investigated with other types of writing. Furthermore, they emphasize that AI should be used as a complementary resource rather than replacing the teacher.

Similarly, Park (2019) studied the validity and effectiveness of Grammarly, an AI-based grammar checking tool, in detecting and reducing grammatical errors in the writing of 59 students at a secondary school in Korea. To do this, they wrote two essays; only in the second essay they were allowed to use AI to check the first. In the end, both pieces of writing were collected. Three English teachers participated as reviewers. The research consisted of a quantitative error analysis to measure the validity of the AI review. The assessments made by the AI and the human reviewers were then compared. Finally, the results revealed that AI was not yet reliable or accurate enough to detect all possible errors compared to human revision. However, it was also found that AI could be useful for improving students' grammatical accuracy, as it was evident that students significantly reduced the number of errors made in the first essay.

Additionally, Amyatun and Kholis (2023) investigated how AI affects the skill of writing exhortative texts. To this end, 20 students from a secondary school in Yogyakarta, Indonesia, were selected using random cluster sampling. The study comprised two research cycles, each consisting of three meetings and four stages: planning, action, observation, and reflection. Before the cycles, a preliminary study was conducted that included interviews, classroom observations, questionnaires, and pre-tests to identify the students' challenges with writing. The results showed a significant improvement in

students' scores after using the AI-based tool QuillBot, as it allowed them to identify and correct errors to refine their writing, as well as contributing to the development of their skills and increasing their confidence when writing. The authors also highlight that these positive results can be enhanced if the teacher provides appropriate feedback.

The research analyzed so far highlight the possibility that AI can be used to improve academic writing skills specifically. However, it is necessary to study its potential to reinforce other types of written production. For this reason, these studies did not consider the writing process; that is, they did not analyze whether AI can be used to reinforce each stage necessary for writing. In this respect, it is necessary to conduct research focused on the use of AI throughout the writing process.

On the other hand, Marzuki et al. (2023) conducted a qualitative study to explore how teachers of English as a foreign language use AI and what impact it has on the quality of students' writing. To this end, interviews were conducted with four teachers with at least three years of experience in teaching English and one year of using AI tools to learn about their perceptions and applications of AI in terms of content and organization. The results showed that teachers use a variety of AI-based tools, such as QuillBot, Wordtune, Jenni AI, ChatGPT, Copy.ai, Paperpal, and Essay Writer to improve the clarity, structure, and content of writing. However, the authors also revealed concerns about a possible over-reliance on these tools, which could limit students' critical thinking and creativity. In this matter, the authors concluded that, although AI can enrich the quality of English writing, its use must be balanced to avoid negative impacts on students' skills.

Similarly, Al-Mahmud (2023) conducted a mixed study to determine whether AI facilitates students' writing and to what extent. To do this, secondary school students from public educational institutions were recruited; the author emphasizes that this allowed him to have a group with different levels of English language proficiency. Quantitative data were obtained through a pre-test and post-test designed to evaluate the writing of the experimental and control groups before and after traditional instruction and artificial intelligence instruction using the Wordtune tool. This information was statistically analyzed using SPSS. In contrast, qualitative data were collected through a textual analysis of writing samples from some participants to assess the impact of artificial intelligence on writing quality and corroborate the quantitative findings. The most relevant results highlight that AI has a favorable impact on writing skills by allowing students to expand their vocabulary and slightly improve sentence structure. Although the

results obtained are positive, the author mentions that there is a risk that students will develop an uncritical dependence on AI; that is, that they will blindly follow the technology without developing their own writing skills.

Additionally, Barrett and Pack (2023) conducted a study using a cross-sectional questionnaire design to compare students' and teachers' perceptions of the use of AI in the academic writing process. The sample included 158 students and 68 teachers, who completed a questionnaire that measured their perspectives on the use of AI in the different stages of the writing process: planning, drafting, and revising. The results showed that both students and teachers perceive the use of AI as acceptable mainly in the initial stages, i.e., idea generation and outlining. With regard to drafting and revision, teachers agreed that AI can be used significantly for assessment and feedback purposes. Finally, the authors emphasize that transparency in the use of AI and adequate training for teachers are crucial elements for the ethical and effective integration of this technology in the classroom.

The research analyzed highlight a key factor in the application of AI in English language teaching: its ethical and transparent use to prevent it from undermining the development of students' writing skills. It also emphasizes the importance of teachers being properly trained and familiar with this technological tool so that it fulfils its objective of reinforcing both the writing process and the production of writing.

Although the use of AI to improve students' writing has been studied internationally, in Ecuador, research on AI in teaching English as a foreign language only provides an approximation of how different actors in the educational community perceive this technological tool through qualitative data.

For example, Chicaiza et al. (2023) conducted a non-experimental study with 50 randomly selected students. Their research focused solely on understanding students' perceptions of the integration of artificial intelligence in the subject of English as a foreign language. First, the students in the sample were asked if they were familiar with the ChatGPT tool. Of the sample, 41 participants confirmed that they were familiar with the technological tool and were sent an electronic questionnaire that allowed us to conclude that students consider ChatGPT to be reliable, as it has helped them with their tasks and could even replace the teacher in some respects. On the other hand, the students considered that it would not be a useful tool for improving aspects of pronunciation and writing. In this respect, the authors suggest that the latter results could be mainly due to

lack of knowledge and training, as students mainly use AI to facilitate the completion of tasks, so it is the teacher who must guide the use of artificial intelligence to improve student learning.

Likewise, Ayala-Pazmiño and Alvarado-Lucas (2023) conducted qualitative research focused on understanding English teachers' perceptions of the use of artificial intelligence in teaching English as a foreign language. The participating teachers were selected for convenience, and data collection was carried out through interviews. The information obtained led to the conclusion that teachers consider the use of artificial intelligence to be a useful tool for improving assessment and feedback processes, as well as increasing student engagement and motivation.

The studies analyzed show that AI is a technological tool with great potential for improving English writing skills. The existing literature suggests that students have a positive attitude towards the integration of AI into their learning, so teachers should channel this predisposition to strengthen language proficiency. It is therefore urgent to carry out research that will enable the design of activity guides for the proper use of this technological tool.

## **2.2. Theoretical Framework**

### ***Artificial Intelligence: Definition and Characteristics***

As technology advances, new tools appear, and existing ones are refined. Artificial intelligence (AI) has been present throughout the years and in different ways that often go unnoticed. For this reason, there is no clear definition of what AI is, and various authors conceive it differently.

For people who are not AI specialists, the first reference to this technology comes from the cinema, where it is treated as a powerful and even threatening instrument, capable of endangering human existence. However, Senior and Gyarmathy (2022) define AI as “a mundane agent’ (p. 79); that is, it is found in every part of everyday life and serves to complete tasks, from the most insignificant, such as serving as an alarm clock, to the most complex, such as processing an ordinary photograph to make it look like it was taken by an expert photographer with advanced resources.

On the other hand, Maurya et al. (2024) propose a more technical definition, describing AI as “the science and engineering of creating intelligent machines, [...] concerned with the development of algorithms, software, and peripheral technologies used to create

intelligence in machines and simulate intelligent behavior in robots and other electronic devices' (p. 1). This definition is consistent with that established by Shah (2023), since it describes AI as a simulation; that is, machines reproduce, to a certain extent, human intelligence. Along the same lines, Chan and Colloton (2024) define AI as an artificial system that can perform tasks using algorithms and computer programs.

To achieve this simulation, AI uses large amounts of information to find correlations and patterns to predict possible outcomes or products, which simplifies the performance of different tasks (Kurni et al., 2023). For this reason, an AI-based technological tool must be specifically and explicitly designed to benefit designers and users in some way; therefore, it must be able to convey the results in a way that is humanly understandable (Yampolskiy, 2024). For Sætra (2022), many of the known technologies have AI as the basis for their operation and define AI as computer systems that are capable of perceiving and responding to the environment in which they operate with a certain degree of autonomy.

AI has advanced so much that it is now capable of simulating human creativity by creating writings, artistic images, and even film scripts (Senior & Gyarmathy, 2022). However, as Yu and Yu (2021) mention, AI does not replace humans but rather allows them to reinforce and exceed the limits of their intelligence. In this sense, within an educational context, AI cannot and should not replace the presence and assistance of a teacher in the teaching process. Nor can it substitute for the effort and work of students to acquire the skills and competencies necessary for their academic, personal, and professional development.

### ***Taxonomy of Artificial Intelligence***

Senior and Gyarmathy (2022), El-Samad et al. (2023) and Chan and Colloton (2024) agree on classifying AI based on its capabilities. For this reason, there are currently three types:

**Narrow or Weak Artificial Intelligence.** Its functionality is limited and slightly below human intelligence; that is, it is programmed and trained to perform specific tasks with precision (Chan & Colloton, 2024). Language translators and virtual assistants such as Siri and Alexa are examples of this type of AI. Furthermore, the capacity of this type of AI is limited, as it is not capable of learning or adapting to the context in which it is being used and is simply designed to perform activities without human assistance (Maurya et al., 2024). This type of AI is widely used in education, especially in foreign language

learning, as a translator. For this reason, despite its limitations, it is a tool that can be useful in certain contexts within English language teaching.

**General or Strong Artificial Intelligence.** Its abilities resemble the cognitive capacities of human beings. In other words, "abilities similar to those related to human intelligence: perception, learning, information storage, pattern recognition, abstraction, planning, decision-making, problem-solving, logic, use of language in communication. Possibly also auxiliary capabilities such as creativity and empathy" (Senior & Gyarmathy, 2022, p. 81). This AI can learn and adapt, so although limited, it is capable of understanding and reasoning (Maurya et al., 2024). This type of AI is still under development and refinement, but it is expected to be capable of reasoning in any intellectual task that requires understanding and learning (Chan & Colloton, 2024). Technology capable of assigning schoolwork, correcting it and providing feedback, facial recognition software, more advanced virtual assistants and autonomous car technology are examples of this type of AI. Due to its characteristics, the use of this technology has become more common in educational contexts by allowing teachers and students to automate different tasks to facilitate their execution.

**Artificial Superintelligence.** Its abilities would surpass those of humans and is what has been observed in science fiction. This type of AI is only a hypothetical stage in which AI would have human capabilities such as creativity, problem solving, decision making, self-awareness and even emotions, so the time it will take to develop it is uncertain (Chan & Colloton, 2024). For areas such as education, where cognitive processes inherent to humans are essential, the implementation of such powerful technology must be approached with caution and critical thinking in order to maximize the benefits that this type of AI can offer and recognize the potential risks, so that the most appropriate strategies can be found to address them for the benefit of education.

### ***Artificial Intelligence Applied to Contemporary Education***

In addition to being present in everyday life, artificial intelligence has begun to be integrated into different fields and areas due to its versatility and diversity of functions. For this reason, AI offers several applications in education, some examples being: support for administrative processes such as plagiarism detection, improvement of education quality through task automation, personalized teaching and content creation by promoting interactive learning environments, and the promotion of inclusion by making information more accessible (Eynon, 2023; Kausar & Ahmad, 2024). The potential of AI in

contemporary education is directly related to its ability to process natural language as humans would.

### ***Personalized Teaching Using Artificial Intelligence***

Over time, AI has been implemented in education mainly in assessment processes and language teaching. This is because AI can be used to assess each student's level of learning and design a specific study plan that can fill any gaps detected (Kurni et al., 2023). For this reason, recent attempts have been made to integrate AI into personalized teaching processes, since by understanding the information obtained from interaction with students, teachers can modify their methodology and design activities that meet the individual needs of each student (Yu & Yu, 2021). Consequently, if AI is integrated properly, teachers would have at their disposal a tool that would allow them to meet the demands of each of their students in a more practical way.

In relation to this, from the students' point of view, AI can help them monitor their learning through intelligent tutoring, materials specifically adapted to facilitate understanding of a subject, and even as an assistant for students with specific educational needs (Yu & Yu, 2021). Sidana and Sidana (2023) agree on this point, mentioning that the implementation of AI in education involves the analysis of learning outcomes, which allows technologies such as “speech recognition, prediction systems, data mining, analytics, virtual assistants, chatbots” (p. 188) to improve students' attitudes in various scenarios, which could be inside and outside the classroom.

Another aspect of personalized teaching through AI has to do with tutoring. Students can simply turn to chatbots or virtual assistants to facilitate their learning; that is, they can ask questions without the fear of doing so in front of the whole class (Kurni et al., 2023). As a consequence, through AI tools, students can reinforce their knowledge without having to directly consult their teacher or classmates, and do so whenever they need to.

### ***Creation of Educational Content through Artificial Intelligence Tools***

The creation of content using AI refers to the production of a variety of digital materials such as textbooks and study guides. In addition, simulators can facilitate the understanding of complex topics, generating learning environments with authentic content that brings students closer to real-life situations (Kurni et al., 2023). In the field of education, digital materials play a fundamental role because they can be used to

maintain students' interest in order to improve their learning by increasing their motivation and promoting their participation in different activities.

There are several examples of how AI can be integrated into classrooms. Using tools such as chatbots, teachers can enhance learning outcomes by encouraging automation and creativity, given that students have immediate access to a wealth of useful information to complete different types of activities (Talha-Junaid et al., 2024). With the advent of chatbots, students can have a virtual assistant at their fingertips to guide them with any questions that cannot be answered by communicating with a teacher. They also have a conversation robot with which they can interact orally or in writing on any topic, whether free-form or contextualized by the teacher.

The creation of content using AI is not limited to use by teachers; students can independently generate information that allows them to explore new knowledge on their own, although it is still necessary for a teacher or adult to guide their use in order for it to be fully beneficial.

### ***Automation of Teaching Tasks with Artificial Intelligence***

In education, there are several administrative processes that consume the time of students, teachers, and administrators. For this reason, when discussing task automation, the perspectives of members of the educational community must be considered. AI contributes to decision-making among administrators because, by facilitating the analysis of large amounts of information, it is possible to review the shortcomings that exist in an institution, making it easier to address them in order to improve educational quality. Furthermore, AI helps reduce the workload of teachers in areas such as tutoring, assessments, grade reports, and feedback, among others (Yu & Yu, 2021). The time no longer spent on these types of activities can be devoted to other activities aimed at improving teaching.

It should be noted that the automation of tasks through AI has some limitations, and although teachers may save time on administrative activities, they will still need to devote time to evaluating activities that AI cannot perform (Kurni et al., 2023). The implementation of AI in teachers' work has raised concerns that need to be addressed critically. For example, there is a possibility that teachers may overuse AI to the point of becoming dependent on this technology. For this reason, it is indispensable that teachers do not abandon their daily interaction with administrators, colleagues, students, and their

representatives, as this contact with the educational community is central to effective teaching. In this way, AI would not replace teachers but rather become a support for carrying out their pedagogical management.

### ***Promoting Educational Inclusion through Artificial Intelligence***

AI applied to education promises to serve as a useful and practical tool for inclusion by allowing students with specific educational needs to access the information and content covered in class in different ways. Furthermore, through AI, students have at their fingertips an interactive tool that allows them to access information and gain independence (O'neil-Gonzalez et al., 2024). It is very important that students with specific educational needs, whether or not associated with disability, are taken into account, and although AI is not the answer in all cases, it is possible to benefit from its many functions to create spaces that promote inclusion. It is essential to remember that learning through AI should not replace real interaction between teachers and students, so this technology should be considered an ally and not a substitute.

On the other hand, according to Treviranus (2022), text-to-speech and screen-reading systems enable blind students or teachers to read; image recognition identifies images that cannot be seen; speech-to-text conversion, gesture recognition, and disambiguation help with writing when students lack the necessary skills to use a keyboard or write; subtitles help students with hearing impairments; AI can translate from one language to another for a language student, and can help a student with dyslexia correct spelling and grammatical errors. These are clear examples of how AI can be adapted to different student profiles to significantly improve their learning. It is therefore advisable that teachers have access to this technology in order to optimize their teaching.

The integration of AI has the potential to transform accessibility to education for students with specific educational needs. Authors such as Trajkovski and Hayes (2025) suggest that this technology even contributes to the pedagogical implementation of the principles of Universal Design for Learning (UDL), an approach that seeks to address diversity in the classroom by creating accessible, equitable, and flexible learning environments for all students regardless of their abilities, backgrounds, or contexts. Consequently, through AI, teachers would have different options for overcoming the various challenges that arise in their classes when it comes to meeting the individual needs and recognizing the strengths of their students in order to contribute significantly to their comprehensive development.

### ***Ethics of Artificial Intelligence within the Educational Field***

Despite all the enthusiasm for implementing new technologies in the classroom, AI is still a machine that can make mistakes and provide inaccurate, biased, and even inappropriate information to students (Kurni et al., 2023). In this sense, because AI lacks emotions, it is up to the teacher to integrate AI in such a way that it does not detrimentally affect students. Teachers must be careful and well informed before using such a versatile technological tool.

AI is undoubtedly a valuable tool in teaching and learning processes. Its ability to simulate the intelligence of teachers and students often makes it impossible to control completely. Precisely for this reason, AI has several consequences whose impact will depend on how teachers teach their students to use it. In this respect, Treviranus (2022) mentions that education is a process with a significant impact, not only on the present but also on the future of society. Therefore, when discussing the application of AI, one must be cautious and consider all its implications. Teachers are often responsible for integrating technology into their classrooms in an attempt to innovate and improve their methodology, so it is required that they are well trained and receive support from the institutions in charge of education.

### ***Writing Proficiency in English as a Foreign Language***

Writing can be defined simply as the use of graphic signs and symbols that represent language; these must be taught and learned, since writing is not innate to human beings (Kkese, 2020). Even so, writing is a skill that is used throughout life. As Aull (2024) mentions, writing is used in a wide range of contexts, from personal to interpersonal, and from informal to formal. This skill is essential for clear and effective communication in various contexts. For this reason, writing is a recursive, socially situated, and dialogic process through which messages are communicated. It includes phases such as planning, drafting, and revising, during which the writer draws on a range of sources of information, such as knowledge of language, text structure, and subject matter (Storch, 2018). Due to all that it entails, writing in English as a foreign language is a demanding and complex skill.

Ur (2024) lists some key and specific characteristics of this skill. First, it is primarily associated with sight and movement. Furthermore, it is productive; that is, the person writing obtains a product at the end of the process. On the other hand, writing also uses

standardized forms. This means that, unlike other skills, written production is more uniform and tends to carefully follow the grammatical rules of the language. Additionally, Crystal (2019) states that writing is “spatial, static, permanent” (p. 309) because there may be a considerable period of time between when a student writes and when they read it; in other words, production and reception do not occur at the same time.

Writing has become a process of great importance for achieving rapid communication through text messages and other means such as blogs and social media (Ur, 2024). For this reason, its proper development is a topic of interest for teachers responsible for ensuring that students are able to communicate in writing. On this matter, Petelin (2022) agrees that the media provide many different opportunities to interact with the whole world. In the context of teaching English, it is necessary that teachers design activities that promote student interaction. In this regard, Siepmann et al. (2008) describe that this interaction can be internal; that is, the student has an internal dialogue and takes notes, or they can also interact with their environment; that is, with their peers, books, magazines, newspapers, and the internet. Furthermore, authors such as Petelin (2022) suggest that writers need adequate information and well-written texts so that they can imitate, emulate and identify errors in order to correct any weaknesses they may have.

In the classroom, there are two main approaches to teaching English writing: writing as a process and writing as a product. Nunan (2015) mentions that there is a prevailing controversy over which approach is most appropriate for developing this skill. On the one hand, there are criticisms of prioritizing product over process. For example, Green (2022) mentions that even in contemporary writing assessment, little attention is paid to the writing process, depriving students of opportunities to generate ideas, interact with their context, and reflect. On the other hand, as Brown and Lee (2015) state, focusing on writing as a product is not negative; in fact, the product is the very purpose of the writing process. Without a final product, writing would be stuck in a permanent state of revision without producing any results.

Although writing is a skill of great importance today, defining the most appropriate approach is a complex task. Therefore, it is up to the teacher to design writing activities according to the approach they want to work with or that their students need. As discussed above, both approaches are relevant, so it would be advisable to combine them in order to work on writing from an eclectic perspective that allows us to take the best of each approach to facilitate the teaching of this skill and reinforce it.

### ***Micro-skills and Macro-skills of Writing in English as a Foreign Language***

In writing, micro-skills are the most specific, basic, and particular skills that contribute to the development of a more complex skill.

- Produce graphemes and orthographic patterns of English
- Produce writing at an efficient rate of speed to suit the purpose
- Produce an acceptable core of words and use appropriate word order patterns
- Use acceptable grammatical systems (e.g., tense, agreement, pluralization), patterns, and rules
- Express a particular meaning in different grammatical forms (Brown & Lee, 2015, p. 437)

In the classroom, a well-developed writing skill entails mastering elements as subtle as the proper use of spelling, vocabulary, and grammar to express messages clearly and precisely. For this reason, it is essential that teachers strengthen micro-skills; otherwise, students would have difficulty communicating effectively in academic, personal, and professional contexts.

On the other hand, macro-skills represent complex, high-level abilities; that is, a skill that involves the integration of several components.

- Use cohesive devices in written discourse
- Use the rhetorical forms and conventions of written discourse
- Appropriately accomplish the communicative functions of written texts according to form and purpose
- Convey links and connections between events and communicate such relations as main idea, supporting idea, new information, given information, generalization, and exemplification
- Distinguish between literal and implied meanings when writing
- Correctly convey culturally specific references in the context of the written text.
- Develop and use a battery of writing strategies, such as accurately assessing the audience's interpretation, using prewriting devices, writing with fluency in the first drafts, using paraphrases and synonyms, soliciting peer and instructor feedback, and using feedback for revising and editing (Brown & Lee, 2015, p. 437)

Just as with micro-skills, the proper development of macro-skills contributes significantly to the overall quality of writing. Consequently, teaching this skill also involves helping students view writing as a cognitive process that entails constantly questioning and reflecting on what they want to communicate in writing. In this way, students will no longer see writing as a mere exercise in penmanship or typing and will become aware that each word or sentence conveys different meanings.

### ***Writing as a Process in English Language Teaching***

When a teacher chooses the writing-as-process approach, they give students the opportunity to think while they write (Brown & Lee, 2015). This means that students must meet a series of requirements before submitting a well-constructed final product. In this sense, “process refers to the steps a writer takes to create a written work” (Nunan, 2015, p. 78). In other words, each step a student takes allows them to improve their work little by little before sharing it with their audience.

Nowadays, it is common to encounter students who have difficulty writing in a foreign language. From this perspective, Johnson (2024) suggests that there are two main reasons for this: first, students are simply taught how to present a final piece of writing and what aspects to consider, omitting the entire process involved in producing it; second, students cannot learn to write from a teacher who does not write. Johnson clarifies that teachers do not need to be professional writers, but they must be constantly exposed to the experience of writing.

Johnson (2024) summarizes the writing process in five steps, although he admits that these may vary in number or name, and may even be repeated:

**First Stage: Preliminary Draft.** This refers to planning; that is, “it includes generating ideas, organizing ideas, and, sometimes, gathering information” (Johnson, 2024, p. 21). In this first step, it is necessary to use different strategies to generate ideas, perhaps the most common being brainstorming.

**Stage Two: Draft.** This is the student's first attempt at writing. The goal is simply to get the student's ideas down on paper (Johnson, 2024). The draft focuses on preparing students to begin writing based on the ideas they developed in the previous stage (Fitria & Monita, 2022). At this stage, it is not necessary for sentences to be structured correctly or for punctuation to be perfect; ideally, students should simply use their imagination and start writing.

**Third Stage: Revision.** This is the core of the writing process. Here, students "revise, reshape, and review their writing many, many times. Parts are added, moved around, or deleted" (Johnson, 2024, p. 22). In this step, students begin to structure the writing so that the ideas expressed are properly connected and the entire text makes sense. Even so, the product of this step is not expected to be perfect, but it should show improvement over what was done previously.

**Stage Four: Editing.** Once the writing has an appropriate structure, students should look for and correct spelling, grammar, and punctuation errors. With reference to this, it is suggested that these aspects should only be polished at this stage, since when a student focuses on errors from the beginning, they may lose valuable ideas and impair the quality of their writing (Johnson, 2024). For this reason, it is necessary to follow the previous steps or at least allow students some time to freely create their draft without having to correct any mistakes they make.

**Stage Five: Publication.** In the final step, students are expected to share their work with others, whether with a classmate, a small group, or even the world via social media or the internet. Here, students are expected to gain and develop "a sense of audience and voice" (Johnson, 2024, p. 22). This means that students will be aware that their writing is directed at someone, so they must pay special attention to how they convey their message; in doing so, they may improve their communication skills.

### ***Writing as a Product in English Language Teaching***

The product refers to the final result, such as an essay or a scientific report, which can be seen and felt (Nunan, 2015). The Common European Framework of Reference for Languages (CEFR) of the Council of Europe (2020) also includes writing as a production skill that is assessed once the piece of writing is complete. This approach could be used when a summative assessment of writing skills is required, as it focuses specifically on aspects of writing. What is to be assessed depends on the purpose of the assessment and is usually set out in a rubric.

For example, the Cambridge B1 Preliminary for Schools exam assesses writing skills by reviewing a student's final written product using a rubric, considering the following dimensions, which are in line with the CEFR:

**Content Dimension.** This refers to the completion of the activity, i.e., whether the student has done what was asked of them in the activity (Cambridge English, 2024). This

dimension also considers whether the information presented in the final piece of writing is relevant to the reader, such that all the information is adequately detailed.

**Communicative Achievement Dimension.** This considers whether the student used an appropriate register; that is, whether they considered the audience for whom the writing is intended (Cambridge English, 2024). The use of language to capture the reader's attention and communicate the intended message is also evaluated. For Punar-Özçelik and Yangın-Ekşi (2023), one of the aspects that hinders the development of writing in students is knowledge and mastery of register; that is, the appropriate use of language considering their audience. It should be considered that the purpose of writing is expression and communication, so if a student is unable to use the appropriate language, readers will have difficulty understanding the message being conveyed.

**Organization Dimension.** This dimension takes into account the appropriate structure for the writing to be presented in a logical and orderly manner (Cambridge English, 2024). Due to its characteristics, this dimension refers to the coherence and cohesion of the writing. The former refers to the logical connection that must exist in the text; that is, that the sentences are written in such a way that the reader can easily follow the flow of thought from one sentence to another and from one paragraph to another. This can be achieved through the use of pronouns, repetition of key words, synonyms, antonyms, connectors, among others. Secondly, cohesion consists of linking ideas through the use of vocabulary and grammatical structures that show relationships such as cause and effect, time, addition, comparisons, contrast, among others (Mujumdar, 2025). If these elements are not present in the writing, the ideas would seem out of place and without logical meaning.

**Language Dimension.** This assesses the accurate use of grammar and vocabulary (Cambridge English, 2024). First, grammar refers to the methodical study of a language, including rules related to syntax, morphology, phonology, and semantics (Mujumdar, 2025). These rules contribute to the proper construction of sentences. In addition, Mujumdar states that grammar can be divided into two types: (a) prescriptive, which refers to the structural rules of a language that establish what is correct and incorrect, and (b) descriptive, which explains how language is used, focusing on its behavior and the changes that occur when people use it.

On the other hand, vocabulary can be defined as knowledge of the meaning of words and is an aspect that must be learned when acquiring a new language (Mujumdar, 2025). In

writing the English language, it is crucial to know how to use the correct word in the appropriate context and situation so that the intended message to be conveyed is understandable.

### ***Artificial Intelligence Applied to Teaching English as a Foreign Language***

For the proper implementation of technological tools in the classroom, two important aspects must be considered: acting as a support for students' cognitive development and connecting them with the social environment in which learning takes place (Jones, 2018). In the context of English language teaching, AI has the potential to facilitate language practice; for example, students can simulate authentic spoken or written conversations on any everyday topic and, at the same time, receive constant feedback so that they can reflect on communication errors and correct them in a timely manner. These functions of AI make it a valuable resource for teachers and students.

As indicated, one of the main uses of AI in foreign language teaching is the interaction that can be generated inside and outside the classroom. In this respect, Muñoz-Basols and Fuertes-Gutiérrez (2024) identify three main aspects in which AI would have a notable impact on the continuous interaction between teachers, AI, and students: (a) opportunities for contact with the language, which means that teachers have the power to promote varied, contextualized, and personalized communicative situations focusing on the development of any skill or in a comprehensive manner; (b) adaptation to different learning profiles, which refers to teaching adapted to the interests, levels, and educational needs of each student; and (c) analysis and systematization of linguistic material, which emphasizes the possibility of awakening students' linguistic awareness by facilitating the identification of recurring or absent patterns in the language. Therefore, to take full advantage of the integration of AI in English as a foreign language learning and achieve meaningful interactions for students, it is pivotal that teachers adequately incorporate the above components.

### ***Artificial Intelligence in Writing English as a Foreign Language***

Writing in a foreign language has become an ongoing challenge for teachers and students due to the complexity of teaching and learning it, which is why innovation in educational methodologies is essential to reinforce such a useful and necessary skill for students' personal, academic, and professional development. At the same time, the development of AI, especially generative AI, has given it the ability to understand and interact with

humans by adapting to the needs of teachers and students. Consequently, the integration of new technologies into English language teaching has created new opportunities to transform methodologies that allow for the reinforcement of different skills separately or holistically. For this reason, it is necessary to learn how to benefit from AI tools and implement them appropriately in English language teaching.

However, before integrating AI into foreign language writing instruction, it is fundamental to raise awareness about its responsible use and be realistic about what this technology can and cannot do. On this matter, Wallwork (2024) mentions that, no matter how much AI is trained, the presence of humans remains indispensable in differentiating what is essential or not in a written work; however, as long as the request is made correctly, a chatbot would be capable of performing functions such as correcting grammatical errors, identifying the proper use of punctuation marks, paraphrasing, summarizing, making suggestions to improve the content and style of the text, making sentences more concise, transforming passive sentences into active ones, making recommendations for the title of the work, transforming a structured summary into an unstructured one and vice versa, helping to write the different sections of a work, generating emails, making suggestions or comments, and representing specific academic situations. In the classroom, teachers could guide the use of AI for these activities so that students can learn how to use it effectively and properly develop their English writing skills.

### ***Teaching Theories Supporting the Learning of English Writing through AI***

AI is an emerging technological tool that continues to improve rapidly. For this reason, it is necessary for teachers to remain trained so that they understand the theoretical foundations and are aware of the methodological updates that guide the implementation of AI in their classrooms.

From this perspective, learning to write in English through AI can be based on different approaches, methods, and techniques, which have been updated over time to meet the needs of society. However, to better understand the theoretical foundations that make it possible to integrate AI into foreign language teaching, it is crucial to define and differentiate the specific levels of conceptualization and organization that guide the teacher's work in the classroom. In light of this, Mujumdar (2024) characterizes them as follows: (a) approaches are abstract concepts, i.e. assumptions or beliefs that guide teaching; (b) methods correspond to the procedures that must be followed in class to

present or develop content in an orderly manner; (c) techniques are mechanisms or strategies for achieving an immediate objective, which should be aligned with the method and approach.

**Communicative Approach.** In this approach, the ability to communicate in different ways and in different scenarios is the goal of language learning (Parrish, 2019). This means that teachers who follow a communicative approach ensure that their students work cooperatively to encourage interaction while solving problems, discussing, or debating using the language being learned. In this way, the integration of technologies such as AI into English language teaching should be done through activities that promote the authentic use of language as much as possible.

**Constructivist Approach.** This approach consists of students constructing language through a series of approximations to the language while resorting to trial and error, hypothesis testing, and creative representations of content (Richards, 2001). This means that the teacher's role is primarily to guide students to become aware of their own learning and acquire strategies that enable them to take an active role in the construction of knowledge.

On the other hand, the constructivist approach has two strands: cognitivist and social. Mujumdar (2024) characterizes them as follows: (a) cognitive constructivism, associated with Piaget, establishes that learning is achieved through a constant process of assimilation, accommodation and modification; this means that students have cognitive structures that allow them to interpret their environment in order to “assimilate” information according to their abilities; then the existing structures are “modified” and, in this way, the new information is “accommodated” in the mind; (b) social constructivism, proposed by Vygotsky, implies that learning is achieved through the interaction of students and their environment.

With reference to this, the aim of integrating AI in English writing reinforcement, by adopting a constructivist approach, is to develop students’ language skills in spaces that foster autonomy through dynamic and interactive activities with technology and the environment. In this way, students gain a sense of awareness about their own learning. However, this does not mean that the teacher is left out of the educational process; on the contrary, their work as a guide to encourage critical thinking about the use of AI is essential.

**Universal Design for Learning (UDL).** This is an approach that allows teachers to address diversity in the classroom by designing flexible materials and activities that are tailored to meet the needs of each student (Gargiulo & Metcalf, 2021). There are three principles that facilitate its application; authors such as Nemeth and Brillante (2018) describe them as follows: (a) the first principle is to provide multiple ways of presenting information, since each student perceives and understands content differently; (b) the second principle has to do with the different ways in which students can carry out activities, meaning that each individual has their own particular way of expressing themselves and demonstrating what they have learned; (c) the third principle relates to motivation, that is, the variety of strategies through which students increase their desire to learn more, do more, and participate more.

In Ecuador, the Ministerio de Educación [Ministry of Education] (2021) proposed the “Universal Design for Learning Guide”, which provides methodological guidelines for teachers of all subjects to apply UDL principles in their classrooms. Consequently, when teaching writing in English as a foreign language using technologies such as AI, it is also necessary to design activities focused on addressing learning diversity, since each student is different and has different ways of engaging in their education.

**Competency-based learning.** This is classified as a communicative method, meaning that language learning focuses on the actual use of language. To implement this method, one must begin by analyzing the skills necessary for a student to function in authentic situations (Thornbury, 2017). Likewise, in the Ecuadorian context, the Ministerio de Educación (2021) designed the “Prioritized Curriculum with an Emphasis on Communication, Mathematical, Digital and Socio-emotional Competencies”, which seeks to strengthen fundamental skills for the 21st century. Therefore, with regard to the integration of AI in the reinforcement of English writing, it is mainly possible to mention communication and digital skills, in terms of text comprehension and production and the responsible use of technology.

**Task-Based Learning.** This is a communicative method in which students must complete a task through interaction with their peers or the environment. In this sense, language is a means to an end and not the end itself (Thornbury, 2017). Therefore, to achieve optimal integration of AI in English language teaching, teachers must propose activities and create spaces for authentic interaction and communication in order to complete different tasks. Although, according to the most current approaches, students lead their own learning, the

presence of the teacher remains essential in order to guide students towards the construction of knowledge and the development of critical thinking so that they can use technology in an ethical and responsible manner.

**Experiential Learning.** This is a method that combines spontaneity, feeling, and deep individual insights with the possibility of rational and critical thinking (Kolb, 2015). This means that learning is achieved through direct experience and reflection. Authors such as Smith and Brown (2022) describe the stages of the learning cycle proposed by Kolb as follows: (a) the first stage is Concrete Experience, in which students have a new experience or experience a familiar one in a different way; (b) the second stage is Reflective Observation, in which a process of reflection on the experience gained takes place; (c) the third stage is Abstract Conceptualization, which consists of constructing meanings from the reflections obtained; (d) the final stage is Active Experimentation, which is related to the application of meanings in authentic contexts.

When it comes to learning to write in English using AI, it is fundamental for students to build their knowledge through direct experience, which is necessary for them to develop their communication and digital skills simultaneously. Furthermore, it is critical that there be a process of constant reflection when using such a versatile tool to avoid its indiscriminate use. In this sense, the teacher's guidance remains indispensable in the design and development of classroom activities to achieve curricular objectives.

**Eclecticism of Principles.** Authors such as Thornbury (2017) propose that all methods are based on others by sharing or recycling aspects among themselves. Eclecticism consists of adopting the best of each method and contextualizing it to the needs of the students, as long as they are consistent with each other; that is, the techniques to be used follow a logical sequence. Therefore, when teaching English as a foreign language, teachers must choose what is best for their students and design their activities in such a way that each individual need can be met. In this way, teaching is understood to be flexible and does not simply consist of following a certain sequence to achieve objectives, but rather, the steps to be followed can be modified to better adapt to changes in society.

**Communication Techniques.** First, the term “technique” refers to one or more activities and tasks that teachers plan and develop together with their students (Brown & Lee, 2015). These authors also classify the techniques applied by teachers. On this matter, one of the many existing categories corresponds to communication techniques, which are open-ended and unpredictable; some examples could be: storytelling, role-playing,

debates, discussions, group work, games, and more. The focus on these types of techniques is more spontaneous, so the teacher intervenes to a lesser extent; this allows learning to be mainly autonomous. From this perspective, the effective integration of AI in reinforcing English language writing should be achieved through activities that promote communication between students and interaction with their environment.

### **2.3. Legal Framework**

The legal framework underpinning this research is based on the articles established in the Constitution of the Republic of Ecuador, the Ley Orgánica de Educación Intercultural (LOEI) [Organic Law on Intercultural Education] and its respective regulations. These regulations address the responsible implementation of technology in education.

#### ***Constitution of the Republic of Ecuador***

Firstly, the Constitution of the Republic of Ecuador (2008) defines the responsibilities of the Ecuadorian State, specifically in Article 347, paragraph 8, which states: “Incorporate information and communication technologies into the educational process and promote the link between education and productive or social activities”. Likewise, regarding the obligations of the State, Article 6, paragraph j, establishes: to guarantee the availability, accessibility, acceptability and affordability of information technologies, digital literacy from an intercultural perspective, and the use of communication in the educational process as fundamental rights, and to promote the link between teaching and productive or social activities.

In Ecuador, the Constitution itself reaffirms that technology must be present in education and that it must be integrated in such a way that all members of an educational community are properly trained to use it responsibly and ethically.

#### ***Organic Law on Intercultural Education and its Regulations***

More specifically, with regard to Ecuadorian education legislation, as part of the rights and obligations of students, Article 7, paragraph u, of the Organic Law on Intercultural Education (2023) states that students have the right to “access and use connectivity, information technologies, networks and digital media, digital literacy, training in the use of digital platforms and the use of communication in the educational process”. Likewise, the Regulations to the LOEI (2023) set out the minimum principles and approaches of the National Education System; specifically, Article 2 states: “it shall promote, among members of the educational community, the development of digital skills and abilities to

manage the safe use of the Internet and other technologies, fully and permanently respecting the rights and responsibilities that guarantee harmonious coexistence”.

The Ecuadorian education system recognizes that technology should be accessible to students and other members of the educational community. Special emphasis is placed on digital literacy, meaning that everyone should have the necessary knowledge to use technology safely in the teaching and learning process. For this reason, as AI is part of the technology that can be incorporated into classrooms, it is vital that students and teachers are aware of the benefits it can bring.

### ***Ministerial Accord***

Finally, Ministerial Accord No. 0052-14 issued in 2014, in Article 1, stipulated that the teaching of English, starting in the 2016-2017 school year in the Sierra region and 2017-2018 the Costa regime, shall be compulsory from the second grade of General Basic Education to the third year of BGU for all public, state-supported private, and private schools in the country. Likewise, Article 7 stipulated that all institutions created after the issuance of this regulation shall offer English as a subject from the 2nd grade of Educación General Básica [Basic General Education] (EGB) to the 3rd year of BGU.

With the issuance of this accord, the Ecuadorian State recognizes the importance of teaching English as a foreign language. Certainly, proficiency in an additional language is of great relevance to the academic and professional lives of students, which is why it is imperative to research, find and propose new methodologies, methods, techniques and strategies that strengthen the skills necessary to communicate in another language.

## CHAPTER III

### METHODOLOGY

#### **3.1. Description of the Study Area**

This research was conducted at the Unidad Educativa Fiscomisional Santa Catalina Labouré, located in Checa, in the city of Quito, in the province of Pichincha. This institution has implemented an innovative methodology that classifies students according to their level of English proficiency. The aim is to personalize teaching, develop language skills appropriately, and ensure that students actually reach the required level by the end of secondary school. To carry out the classification, an assessment was administered at the beginning of the 2024-2025 academic year. Students who achieved level B1 demonstrated a high command of vocabulary and grammar, which was what the test measured; however, over the course of the period, some shortcomings were observed in writing activities.

On the other hand, the school had a computer lab that was suitable for students to develop their digital skills optimally in any subject. Therefore, in order to take advantage of the available resources and reinforce English writing skills, it was proposed to design an activity guide based on the use of AI that would allow both purposes to be fulfilled.

#### ***Population and Sample***

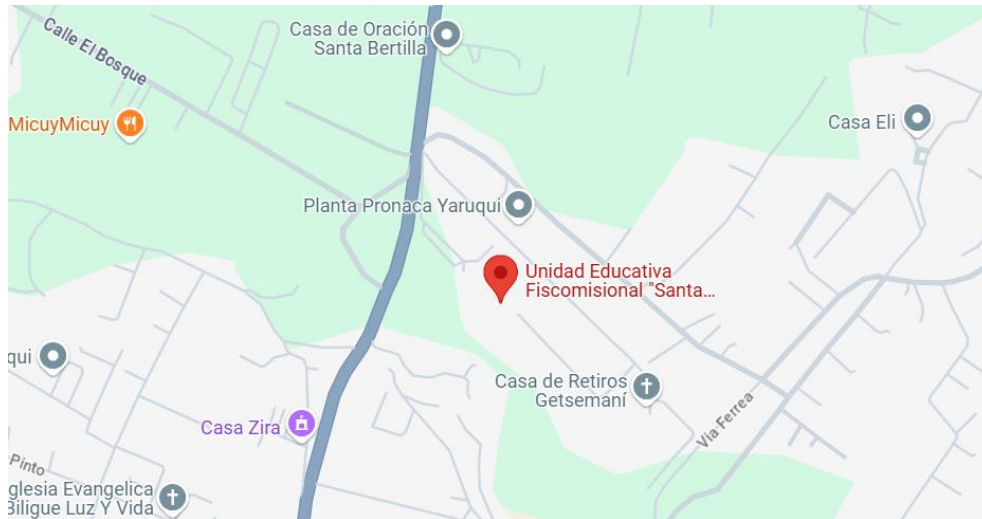
At the time of this research, the Unidad Educativa Fiscomisional Santa Catalina Labouré had 960 legally enrolled students, who constituted the population. Of this number, 160 students were at the BGU level, who were classified according to their level of English proficiency. Consequently, for the data collection stage, intentional non-probabilistic sampling was used, and 22 second-year BGU students who were placed at level B1.1 were selected. This sampling method was chosen because it allowed the researcher to intentionally select participants who met specific criteria relevant to the study's objectives; in this case, students with an intermediate English proficiency level (B1.1), which ensured that they possessed sufficient linguistic competence to engage meaningfully in the proposed activities and provide reliable data.

The school also had 64 teachers of different subjects, four of whom belonged to the foreign language area, English. Excluding the researcher, three teachers participated in the semi-structured interview: two women and one man, all of whom had at least five years of experience in language teaching. The inclusion of these teachers was also

intentional, as they were directly involved in English instruction at the BGU level and therefore could provide informed insights regarding teaching practices, challenges, and students' language development. This selection strategy ensured that the participants represented key perspectives within the educational context relevant to the research focus.

**Figure 1**

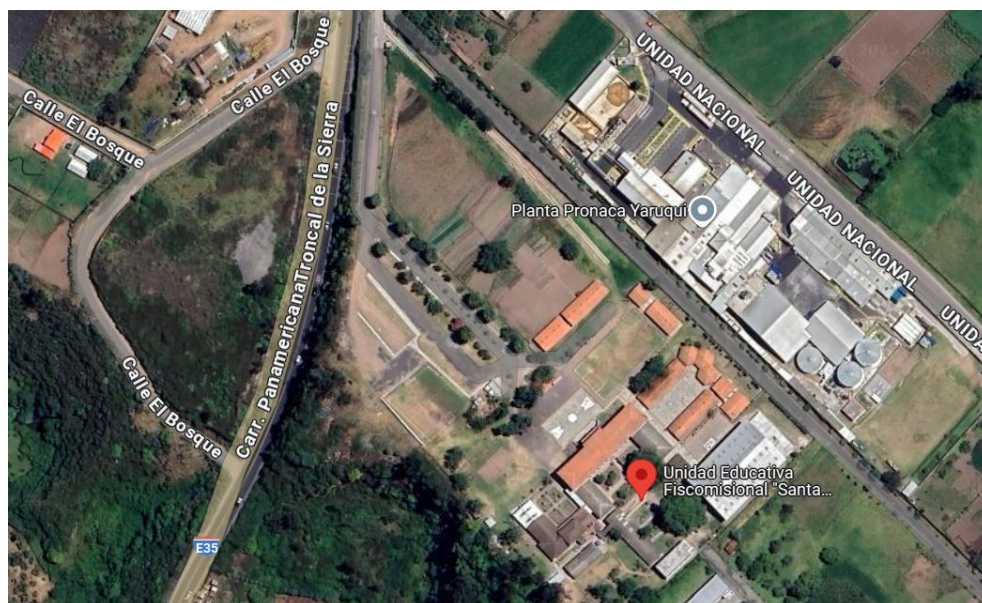
*Geographical Location of the Study Area*



*Note.* Retrieved from Google Maps on 23 April 2025.

**Figure 2**

*Satellite View of the Study Area*



*Note.* Retrieved from Google Maps on 23 April 2025.

### **3.2. Research Approach and Type**

The approach of this research is mixed because elements of qualitative and quantitative methods were combined to obtain more meaningful information, which allowed for a deeper understanding of the relationship between AI and the reinforcement of English writing skills. Additionally, this approach is mainly used when the nature of the subject to be studied is complex because it is composed of both objective and subjective realities (Hernández & Mendoza, 2018). Therefore, this research aimed to collect data quantitatively, using observation to measure writing as a process through an estimation scale and applying an objective test to diagnose the level of writing skills of the students in the sample. Qualitatively, interviews were conducted with English teachers to describe their knowledge and experience with the use of AI in their classrooms. All of this was done to design an AI-based activity guide to reinforce English writing skills.

Furthermore, this research is exploratory in nature because it studied a topic that has not been widely addressed in Ecuador. This type of research is useful when studying a topic about which little information is available, or phenomena or situations that are relatively unknown, to serve as a basis for future research with a higher level of detail and rigor (Hernández et al., 2014). Furthermore, this research sought to address the topic from a new perspective, since, according to the existing literature, only the perceptions and attitudes of Ecuadorian students and teachers towards the integration of artificial intelligence in the teaching of English as a foreign language are known.

### **3.3. Definition and Operationalization of Variables**

**Table 1***Variable Operationalization Matrix*

Variables	Dimensions	Indicators	Items	Techniques	Instruments
<b>Independent Variable:</b> Artificial intelligence	Definition and taxonomy	Definition	What do you know about artificial intelligence (AI)? How would you describe your experience with AI inside and/or outside the classroom? What do you consider to be the advantages and disadvantages of AI in teaching English as a foreign language?	Structured interview	Interview guide
		Types of AI	What types of AI are you familiar with or have you used in an educational context? What AI tools have you used in your classes? Could you describe how you used them?		
	AI applied to education	Personalized teaching	Do you believe that the use of AI promotes more meaningful learning in contrast to traditional methods? How do you use or would you use AI to personalize your teaching? How do you think AI could improve the English language teaching-learning process for BGU students?		
		Content creation	How do you use or would you use AI to create educational content for teaching English? How do you assess or would you assess the quality and accuracy of AI-generated content before using it in class? How do you ensure or would you ensure that AI-created content aligns with curriculum objectives?		

		Task automation	How useful do you consider AI to be in current educational processes? How do you use or would you use AI to automate tasks in your teaching practice?		
		Inclusion	How do you use or would you use AI to promote inclusion in the classroom?		
	Ethics of AI in education	Ethical use of AI	Have you received any academic training in AI? If so, could you explain it? If not, what aspects of AI would you like to be trained in? How do you ensure or would you ensure that you use AI ethically and responsibly in your teaching? How do you think AI can contribute to the development of students' digital English language competencies? What challenges do teachers face when using AI in their classes?		
<b>Dependent Variable:</b> Writing in the English Language	Writing as a process	Preliminary draft	Generate, organize ideas and gather information when necessary.	Structured observation	Estimated scale
		Draft	Express ideas without the need to structure sentences properly.		
		Revision	Review, reshape and revise the writing to begin structuring it.		
		Editing	Look for and correct spelling and grammatical errors.		
		Publication	Share the written product with the class to develop a sense of audience and voice.		
	Writing as a product	Content	Relevance of content and information.	Cambridge B1 Preliminary Examination Rubric	
		Communicative achievement	Convey ideas clearly and directly to capture the reader's attention.		
		Organization	Coherence and cohesion.		
		Language	Vocabulary and grammar.		

### **3.4. Procedures**

This research had a sequential explanatory design; that is, data was collected quantitatively and then additional information was obtained using qualitative methods. After that, the findings from both stages were integrated into the interpretation and preparation of the study report (Hernández & Mendoza, 2018). Finally, once the qualitative and quantitative results were analyzed, an AI-based activity guide was designed to reinforce English writing skills. To this end, the research was carried out in three phases:

#### **Phase 1: Diagnosis of the level of proficiency in English writing among second-year BGU students at the Unidad Educativa Fiscomisional Santa Catalina Labouré.**

In the first phase, three sessions were held to complete the writing process (preliminary draft, draft, revision, editing, and publication), adapting question two from part two of the Cambridge B1 Preliminary exam writing test. This test was conducted on paper; that is, participants wrote by hand. Structured observation was used for each stage, and data was collected using an estimation scale to determine whether the students successfully completed the purpose of each phase of the writing process. In the last session, the students worked on the final product; this writing was used to evaluate writing as a product. The rubric from the same exam was used for the evaluation. Once the writing test was fully administered, it was possible to determine the level of mastery of writing skills. These documents are available as open access resources on the official website of this organization. Both data collection instruments, the estimation scale and the objective test, were validated by three experts in the field of education.

Descriptive statistics were applied to summarize the distribution of results across five performance indicators for the diagnosis of writing as a process (Very Poor, Deficient, Acceptable, Good, and Excellent) and six bands for the diagnosis of writing as a product (0, 1, 2, 3, 4, 5, 6). Given the categorical nature of the data, the mode was selected as the primary measure of central tendency, as it identifies the proficiency level most frequently achieved by students. Data were systematically organized and tabulated using spreadsheet software, which facilitated the identification of the mode and the graphical visualization of frequency distributions. This approach ensured that the analysis was both precise and interpretable, enabling a clear understanding of students' dominant performance levels in writing.

## **Phase 2: Description of the digital competencies of English teachers at the Unidad Educativa Fiscomisional Santa Catalina Labouré with respect to the use of artificial intelligence.**

In the second phase, the three English teachers participated in a semi-structured interview that addressed the dimensions of definition and taxonomy, AI applied to education, and the ethics of AI in education. The qualitative data were analyzed through a manual coding process, which is useful when one seeks to “reveal potential meanings and develop ideas, concepts, and hypotheses” (Hernández & Mendoza, 2018, p. 474). The instrument used (an interview guide) was validated by three experts in the field of education.

## **Phase 3: Design of an activity guide based on the use of artificial intelligence to reinforce English writing skills in second-year BGU students at the Unidad Educativa Fiscomisional Santa Catalina Labouré.**

In the third phase, once the information obtained had been analyzed and processed, a methodological triangulation was carried out to validate and enhance the credibility of the results. The mode was employed as the primary measure to identify the proficiency level most frequently achieved by students. This approach allowed the study to provide a representative overview of students’ writing skills.

For the qualitative data, information gathered from the semi-structured interviews was categorized and analyzed thematically, identifying recurring ideas and patterns related to teaching practices and students’ use of artificial intelligence tools in language learning. The integration of both data types through triangulation strengthened the validity of the findings and provided a more comprehensive interpretation of the research problem. Finally, based on these results, an activity guide supported by artificial intelligence was designed to reinforce English writing skills.

### **3.5. Bioethical Considerations**

This study involved BGU students at the B1.1 level, so it was necessary to obtain an informed consent form to ensure they were aware of how the collected information would be used. Additionally, since they were minors, it was necessary for their parents to be informed and to grant the appropriate authorization. Likewise, the authorities and teachers interviewed were informed of the purpose of the research and the process by which the data obtained would be handled; they also eventually signed an informed consent form to avoid any controversy.

## CHAPTER IV

### RESULTS AND DISCUSSION

The results of this research provide significant information on the integration of artificial intelligence in reinforcing English language writing among high school students. Furthermore, the implications of the findings are discussed in the context of the existing literature, providing insights into their agreement or divergence from one another. Consequently, once the data collection instruments were applied, the following results were obtained:

#### **4.1. Diagnosis of the level of proficiency in English writing among second-year BGU students at the Unidad Educativa Fiscomisional Santa Catalina Labouré.**

In order to diagnose the writing proficiency of BGU students, exercise two of the Cambridge B1 Preliminary writing test was administered, as it was considered a valid and reliable assessment. First, writing was evaluated as a process.

**Table 2**

*Diagnosis of Writing as a Process: Preliminary Draft Stage*

<b>Indicators</b>	<b>Participants</b>	<b>Percentage</b>
Very poor	0	0%
Deficient	12	54.55%
Acceptable	5	22.73%
Good	4	18.18%
Excellent	1	4.55%
<b>Total</b>	<b>22</b>	<b>100%</b>

The preliminary draft is the first stage of the writing process. Here, it was observed that no participant received the “Very Poor” indicator, while 54.55% of participants were rated “Poor” because they generated few ideas in a disorganized manner; these ideas were basic and had minimal connection to the activity’s theme. Additionally, 22.73% demonstrated an “Acceptable” level after meeting the minimum requirements, meaning they generated and organized some ideas that required adjustments for greater clarity. On the other hand, 18.18% reached the “Good” indicator, and only 4.55% fell into the “Excellent” category, as they were able to generate and organize relevant and pertinent ideas to successfully fulfil the purpose of the test. It is necessary to note that, during all stages of the diagnostic assessment, participants completed the task primarily on their own, with minimal teacher

assistance. This could be one of the reasons explaining the students' poor performance at this stage of writing.

In this respect, Rashid et al. (2022) mention that teachers should use as many techniques as possible to help students generate ideas; the authors list techniques such as brainstorming, mind maps, lists, and note-taking. It is common for teachers, when starting a class under a cognitive approach, to encourage students to generate ideas for tackling the content; however, it is crucial that students develop their critical thinking and be able to apply prewriting techniques on their own.

**Table 3**

*Diagnosis of Writing as a Process: Draft Stage*

<b>Indicators</b>	<b>Participants</b>	<b>Percentage</b>
Very poor	0	0%
Deficient	10	45.45%
Acceptable	7	31.82%
Good	5	22.73%
Excellent	0	0%
<b>Total</b>	<b>22</b>	<b>100%</b>

During the draft stage, it was observed that no participant received the “Very Poor” indicator, while 45.45% presented minimal ideas that appeared to be logically disconnected; that is, they reached the “Deficient” level. Additionally, 31.82% reached the “Acceptable” indicator, meaning they only presented enough ideas. On the other hand, 22.73% of the participants were able to express their ideas, although this did not mean they structured their sentences properly, and their writing began to take shape as they organized the content according to the structure provided in the exercise; this corresponds to the “Good” indicator. Finally, no participant reached the “Excellent” indicator. As in the previous stage, a considerable percentage of participants have difficulty even writing the first draft of the paper.

In this context, Rashid et al. (2022) mention that teachers should provide models, samples, and guidelines that expose the vocabulary and key words related to the topic or genre of the text so that students are adequately orientated. Additionally, Villamizar and Jaimes (2021) emphasize that teachers should encourage reflection among students and help them “learn to treat first drafts as initial attempts rather than final products” (p. 2265).

Once again, the teacher’s role as a guide and source of support in creating an environment free from pressure to write perfectly from the outset is emphasized. Furthermore, it is necessary for students to be aware that writing is a process involving multiple drafts and constant revisions. In this way, they will develop a positive attitude towards this skill, and their chances of successfully completing this stage will increase.

**Table 4**

*Diagnosis of Writing as a Process: Revision Stage*

<b>Indicators</b>	<b>Participants</b>	<b>Percentage</b>
Very poor	0	0%
Deficient	15	68.18%
Acceptable	5	22.73%
Good	1	4.55%
Excellent	1	4.55%
<b>Total</b>	<b>22</b>	<b>100%</b>

The review was the stage that took the longest to complete. Here, the participants had a full session to reshape the text as they saw fit. According to the scale, it was evident that no participant scored at the “Very Poor” indicator, while 68.18% reached the “Deficient” level; that is, they conducted only a minimal review, identifying some areas for improvement; however, the content was not restructured, so their writing exhibited deficiencies in coherence and cohesion. Additionally, 22.73% achieved the “Acceptable” level because they performed a basic review; that is, they only made a few changes to the text’s structure. Finally, 4.55% received the “Good” indicator, and another 4.55% achieved the “Excellent” rating, since they reorganized the content of their papers to structure their ideas clearly and logically. These results show that students have significant difficulties reviewing and restructuring their writing to improve it.

In this sense, authors such as Rashid et al. (2022) mention that an effective way to promote revision skills in writing is peer assessment. Likewise, Villamizar and Jaimes’s (2021) research argues in favor of collaborative writing during the drafting and revision stages because it provides students with the opportunity to share suggestions, make changes, and contribute to improving the written product. On the other hand, authors such as Apridayani et al. (2024) advocate for self-assessment so that students can develop their critical and analytical thinking. Consequently, it can be said that collaborative work is essential in developing writing skills, since students often feel more comfortable sharing

their ideas with their classmates, generating reflections that help them improve their ability to write in a foreign language.

**Table 5**

*Diagnosis of Writing as a Process: Editing Stage*

<b>Indicators</b>	<b>Participants</b>	<b>Percentage</b>
Very poor	0	0%
Deficient	7	31.82%
Acceptable	12	54.55%
Good	3	13.64%
Excellent	0	0%
<b>Total</b>	<b>22</b>	<b>100%</b>

During the editing stage, participants polished their work; that is, they looked for spelling and grammatical errors and corrected them appropriately. For this, they were allowed to use a dictionary and the student book for their level so they could review the grammatical aspects previously covered. It should be clarified that the writing was done by hand and no electronic devices were allowed, so the possibility of using autocorrection or translation tools was minimal. In relation to this, the results indicated that no participant reached the “Very Poor” level; meanwhile, 31.82% of participants reached the “Deficient” level, having made only minimal corrections of basic errors and omitting significant ones. Likewise, 54.55% reached the “Acceptable” indicator, which means that, despite the corrections, the writing still contains grammatical errors. On the other hand, 13.64% performed a detailed edit; that is, they corrected most of the errors and improved the text’s clarity, achieving the “Good” rating. Finally, no participant received the “Excellent” rating.

Regarding grammar, it was evident that students omitted making corrections because they found it difficult to identify the tense, aspect, and mood of the verbs they needed to use to express their ideas. Apridayani et al. (2024) explain that the grammatical rules of the English language are complex; that is, the structures are too rigid and the use of verb tenses can be confusing. In this connection, students face a considerable challenge, as they must master a language that combines structural rigidity with intricate grammatical rules that sometimes seem incoherent to them. Consequently, if teachers are unable to reinforce writing skills through pedagogical approaches that prioritize meaningful practice, students would constantly need grammar rule guides, which would prevent them

from achieving an adequate level of autonomy to express themselves and communicate through written language.

**Table 6**

*Diagnosis of Writing as a Process: Publication Stage*

<b>Indicators</b>	<b>Participants</b>	<b>Percentage</b>
Very poor	0	0%
Deficient	6	27.27%
Acceptable	12	54.55%
Good	2	13.64%
Excellent	0	0%
<b>Total</b>	<b>22</b>	<b>100%</b>

For the final stage of the writing process, participants were expected to develop a sense of audience; that is, to understand to whom the writing was addressed. Consequently, it was observed that no participant reached the “Very Poor” level, while 27.27% attained the “Deficient” indicator; that is, they were able to convey their message with little clarity, which means there are shortcomings in developing a sense of audience. On the other hand, 54.55% achieved the “Acceptable” rating; that is, although the message they want to convey is understandable, it could be improved to connect with the audience more effectively. Additionally, 13.64% of participants conveyed a clear message, reaching the “Good” indicator. Finally, no participant achieved an “Excellent” performance. Overall, it was evident that students are able to convey messages, although with considerable difficulty.

The publication stage is important for students because it allows them to share their work with a real audience; it also instills a sense of belonging, which motivates them to improve their performance in order to be recognized as writers (Rashid et al., 2022). Consequently, this stage helps students move beyond perceiving that they are merely completing a meaningless activity for a grade and instead begin to see themselves as writers. Developing this sense of identity is crucial for keeping them motivated and boosting their confidence in communicating through writing.

Once the diagnostic assessment of writing as a process was conducted, it was found that most students reached the “Deficient” level and exhibit significant difficulties in the pre-draft, draft, and revision stages, indicating problems primarily in initiating writing; that

is, generating, organizing, and restructuring their ideas. This indicates that it is necessary to significantly reinforce students' skills in these areas. In contrast, most students reached the "Acceptable" level in the editing and publishing stages, which means that work is needed in these stages only to refine students' performance. This diagnosis has made it possible to identify the weaknesses and strengths throughout the writing process on which the activity guide proposed in this research has focused.

Subsequently, in order to diagnose writing as a product, the text obtained in the final phase was evaluated. For this purpose, the writing test rubric from the Cambridge B1 Preliminary exam was used. This rubric considers the dimensions of content, communicative achievement, organization, and language. Additionally, it consists of different bands ranging from the lowest score, 0, to the highest, 5; these reflect the overall quality of the writing in order to evaluate key criteria. Below, each dimension considered in the evaluation rubric is detailed, indicating the number of participants who reached each band.

**Table 7**

*Diagnosis of Writing as a Product: Content Dimension*

<b>Bands</b>	<b>Participants</b>	<b>Percentage</b>
5	0	0%
4	2	9.09%
3	7	31.81%
2	6	27.27%
1	5	22.73%
0	0	0%
<b>Total</b>	<b>22</b>	<b>100%</b>

The Content dimension considers whether participants responded appropriately to the activity; that is, whether they did exactly what was expected of them. Additionally, the content is evaluated to determine whether it is relevant, ensuring that the reader receives all the necessary information to understand the message. The results indicate that no participant reached band "5," while 9.09% reached band "4," having written the text mostly as required. Additionally, 31.81% scored band "3," while 27.27% achieved band "2," because they only partially met the objective of the activity; that is, it is evident that information was omitted or irrelevant ideas were included, although the reader would still understand the message being conveyed. On the other hand, 22.73% reached band "1"

because they demonstrated that the purpose of the activity was not fully understood, and the information was significantly irrelevant, leaving the reader only minimally informed. Finally, no participant received a “0” band.

These results align with the findings of González-Cabrera and Castro-Villalobos (2022), who found that students fail in the content dimension because they misunderstand the task, leading them to omit relevant information necessary for the reader to be fully informed. In light of this, Gualsaquí-Gualsaquí and Gómez-Escorcha (2022) clarify that, for a student to understand and fulfil the objective of a writing activity, teachers must present the purpose in a clear and understandable manner to avoid confusion and disorganization. Consequently, in order for students to perform adequately and include only relevant content in their writing, teachers must ensure that they convey the activity instructions clearly and verify that students have understood what they are supposed to do.

**Table 8**

*Diagnosis of Writing as a Product: Communicative Achievement Dimension*

<b>Bands</b>	<b>Participants</b>	<b>Percentage</b>
5	0	0%
4	5	22.72%
3	6	27.27%
2	6	27.72%
1	5	22.72%
0	0	0%
<b>Total</b>	22	100%

Communicative Achievement refers to the appropriate use of style, taking into account the context in which the text is written and the audience. In this dimension, the genre, format, register, and function of the writing were evaluated to assess the communication of well-developed ideas and the maintenance of the reader’s attention. The results indicate that no participant reached band “5,” while 22.72% achieved band “4,” meaning they used communication conventions appropriately to produce an engaging piece of writing. On the other hand, 27.72% of participants scored band “3” and another 27.72% achieved band “2”; this means they communicated their ideas in a concrete yet limited way, using a simple style with basic vocabulary and grammar. On the other hand, 22.72% used

simple, overly short sentences, reaching band “1”. Finally, no participant received a band score of “0”.

In the analysis of the results obtained, it was evident that students face significant difficulties in identifying the genre, format, register, and function of the text; as a result, their ability to adapt their language to the communicative purpose was impaired. In this regard, Callata-Mamani et al. (2023) found that students, even with a high level of English proficiency, prefer to use overly basic vocabulary and expressions and few logical connectors, thereby limiting the linguistic richness and clarity of their texts. It should be considered that the writing task was at the B1 level according to the CEFR, and that the high school students who participated in this study were, in fact, at that level. These results demonstrate the need to strengthen strategies for evaluating the purpose of writing so that students can appropriately select textual elements that reflect a conscious use of communication conventions appropriate to their level, thereby capturing the reader’s attention.

**Table 9**

*Diagnosis of Writing as a Product: Organization Dimension*

<b>Bands</b>	<b>Participants</b>	<b>Percentage</b>
5	0	0%
4	2	9.09%
3	5	22.73%
2	3	13.64%
1	12	54.55%
0	0	0%
<b>Total</b>	22	100%

The Organization dimension encompasses the structure of the text. Here, participants were evaluated on whether they wrote in a logical and fluid order. Consequently, no participant reached band “5”; while 9.09% achieved band “4” because they organized their writing coherently by using connectors and cohesive devices, making the text easy to understand and the sentences properly connected. In contrast, 22.73% scored Band 3 and 13.64% scored Band 2 because they produced a similar piece of writing, albeit using simpler vocabulary. On the other hand, 54.55% used overly common words; that is, they scored in Band 1. Finally, no participant received a band score of “0”.

This dimension is directly related to the coherence and cohesion of the text and to the revision stage, during which ideas were to be arranged logically. The students' low performance observed in this study aligns with the findings of Wang and Xie (2022), who found that students have difficulty organizing their discourse effectively. The authors indicate that this may have been due to an imbalance in the allocation of time among the various writing processes, since students lack strategies for managing their time effectively.

**Table 10**

*Diagnosis of Writing as a Product: Language Dimension*

<b>Bands</b>	<b>Participants</b>	<b>Percentage</b>
5	0	0%
4	4	18.18%
3	10	45.45%
2	4	18.18%
1	4	18.18%
0	0	0%
<b>Total</b>	22	100%

With respect to the Language dimension, participants were evaluated on whether they possessed a good range of vocabulary and grammar and used them accurately. Consequently, no participant reached band “5,” while 18.18% attained band “4” because they used everyday vocabulary within the context specified in the activity and appropriately combined it with less common lexis related to the topic of the writing. Furthermore, they demonstrated good control of grammar appropriate for the activity. Finally, the errors present in the writing do not prevent the message from being conveyed and understood. Additionally, 45.45% scored band “3” and another 18.18% achieved band “2” because they used appropriate vocabulary but made some errors when employing unusual expressions. Additionally, there was a tendency to repeat words, which suggests they lack a varied vocabulary to express their ideas; despite this, the message is comprehensible, albeit with some difficulty. On the other hand, 18.18% were placed in band “1” because they completed the activity using basic, albeit reasonably appropriate, vocabulary. Likewise, the grammatical forms are simple, and the existing errors prevent the message from being clear and the information from being understood. Finally, no participant received the “0” band.

This dimension relates to the editing phase, in which students identify and correct spelling and grammatical errors. The results obtained in this study coincide with those of González-Cabrera and Castro-Villalobos (2022), whose study revealed that students use inappropriate vocabulary and phrases and that their control of grammatical forms is deficient; the latter, in fact, could even hinder text comprehension. Consequently, it can be stated that correcting spelling errors takes precedence over controlling grammar.

Once the assessment of writing as a product was completed, it was found that most students reached band “3” in the dimensions of content, communicative achievement, and language. This would indicate that the students are able to write at a functional and adequate level; that is, their writing reasonably fulfils the purpose of the task with basic structures and vocabulary, although some errors are present. On the other hand, most students scored in band “1” in the organization dimension, which would mean that they have difficulty writing coherent and cohesive texts. Consequently, this diagnosis has enabled the identification of strengths and weaknesses in written production, which has guided the design of the activity guide proposed in this research.

#### **4.2. Description of the digital competencies of English teachers at the Unidad Educativa Fiscomisional Santa Catalina Labouré with respect to the use of artificial intelligence.**

In order to provide a detailed description of English teachers’ digital competencies regarding the use of AI, the responses obtained in a semi-structured interview were analyzed. The questions addressed three dimensions with their respective indicators: definition and taxonomy (definition and types of AI), AI applied to education (personalized teaching, content creation, task automation, and educational inclusion), and the ethical use of AI (AI ethics in education). The results offer a comparative overview of teachers’ responses, highlighting similarities and differences in their approaches. Below are the most salient ideas extracted from the analysis of each teacher’s responses, identified by numbers to ensure the confidentiality of the information:

**Table 11***Digital Teaching Competencies: Definition of AI*

<b>Indicators</b>	<b>Teacher 1</b>	<b>Teacher 2</b>	<b>Teacher 3</b>
	A technological tool that simulates human intelligence.	Technology that mimics human abilities such as learning and problem-solving.	An innovative tool to support learning.
Definition	Positive experience for searching information and enhancing the classroom experience.	Positive experience in planning and organizing educational resources.	Positive experience in generating ideas and adapting materials to meet needs.
	<b>Advantages:</b> Promotes independent work.	<b>Advantages:</b> Streamlines processes and helps focus time on more relevant aspects such as assessment and feedback.	<b>Advantages:</b> Improves students' autonomy.
	<b>Disadvantages:</b> It is not completely reliable; if the user is not trained, they may make mistakes.	<b>Disadvantages:</b> It can create dependency.	<b>Disadvantages:</b> The materials generated are not always suitable.

For the Definition and Taxonomy dimension, two indicators were considered. The first indicator is Definition. In which two questions were asked. Question 1, “What do you know about artificial intelligence (AI)?” was posed to determine teachers’ level of familiarity with and understanding of AI. Considering the respondents’ answers, it is observed that there are commonalities in defining AI as a tool that simulates human capabilities, although slight differences in focus can also be discerned. For example, Teacher 1 adopted a more technical perspective; Teacher 2 used a definition more orientated towards the cognitive; and Teacher 3 took a more pedagogical approach. This allows us to conclude that teachers have a general understanding of what AI is within an educational context.

These results complement those of Ibrahim (2024), who highlighted that, although there is a greater awareness of AI-related concepts and their potential in education, significant gaps have also emerged in teachers’ knowledge and skills regarding AI. About this, it is

imperative to foster AI literacy among teachers to facilitate effective integration in the classroom.

On the other hand, question 2: “How would you describe your experience with AI inside and/or outside the classroom?” was posed to explore how teachers have integrated this technology into their pedagogical practice and daily life. From the responses, there is a general consensus that the experience has been positive, although there are slight differences. Consequently, Teacher 1’s experience is geared towards enriching the content they wish to cover in class to invigorate teaching; Teacher 2’s response reflects the use of AI for more administrative tasks; and Teacher 3 describes their experience from a more creative perspective.

These perceptions align with those obtained by Mohebi (2025) in his research: teachers’ experiences with AI are so varied because of the different approaches and purposes for which it is used in education; for example, its utility for grammar correction, writing, and the development of teaching materials stands out. Consequently, it is evident that teachers primarily value AI as an assistant in their work, although each prioritizes different functions according to their needs; this suggests that AI can be easily adapted to various educational objectives.

As for question 3: “What do you consider to be the advantages and disadvantages of AI in teaching English as a foreign language?”, it was designed to identify the teacher’s perception of the practical benefits and limitations of AI in their specific area of training. After analyzing the responses, it was found that two interviewees highlighted AI’s ability to foster student autonomy, and one emphasized the optimization of certain teaching processes, such as assessment and feedback, as an advantage. Regarding the disadvantages, each participant has contributed their ideas from different perspectives. On this point, Teacher 1 emphasizes that if an AI user is not adequately trained, they may make mistakes, making it impossible to rely entirely on this technology; Teacher 2 pointed out that the potential for dependency poses a considerable risk to students; and Teacher 3 mentioned that the information provided by AI is not always appropriate for the educational context in which it is intended to be used.

These results align with the various perceptions gathered in Bernilla-Rodríguez’s (2024) study; first, teachers highlight that AI serves as an editing and writing tool by facilitating style correction and text creation, and they also emphasize its usefulness in organizing ideas or data and in fostering enriched learning and the discovery of new knowledge; on

the other hand, the main disadvantages include some teachers' limited understanding of AI, the possibility that AI could undermine students' critical thinking and reflection, the lack of oversight of the veracity of AI-generated information, and the concern that this technology could disconnect teachers from their students. Consequently, it can be inferred that teachers are aware of the benefits of AI in teaching and also recognize the potential risks. This reflects the need to provide adequate support when integrating AI into the educational process.

**Table 12**

*Digital Teaching Competencies: AI Taxonomy*

<b>Indicators</b>	<b>Teacher 1</b>	<b>Teacher 2</b>	<b>Teacher 3</b>
Types of AI	AI that generates content such as images and text.	AI for translation and grammar corrections.	AI that generates images and text.
	Activities with ChatGPT and others during class time.	Mainly Duolingo to reinforce content and ChatGPT to design activities.	ChatGPT for generating quick assessments.

The second indicator corresponds to AI Types; here, two additional questions were asked. Question 4: “What types of AI are you familiar with or have you used in the educational context?” aimed to explore teachers' level of familiarity with different AI tools and their functionalities in education. The responses indicate that Teachers 1 and 3 have experimented with creative and generative tools, demonstrating an interest in using this technology for educational purposes. On the other hand, Teacher 2 expressed interest in using AI in a more specific context, highlighting its utility in linguistic applications directly related to teaching English as a foreign language.

Not all AI tools are the same, so they must be properly classified according to their capabilities and the area in which they are to be applied (Bernilla-Rodríguez, 2024). The analysis of the responses revealed that teachers primarily turn to generative AI tools, either general or strong, for their versatility in creating educational resources. Although narrow or weak AI is also used; that is, translators and grammar checkers. This shows a moderate level of familiarity, sufficient to support pedagogical objectives.

Regarding question 5: “What AI tools have you used in your classes?” “Could you describe how you used them?” was intended to elicit concrete examples of the tools the

teacher used and how they were implemented in their teaching. The responses reflect a predominance in the use of tools such as ChatGPT, but with variations in their purpose and mode of application. Teacher 1’s response suggests a dynamic approach, as it integrates AI in a way that creates opportunities for students to interact in class. Teacher 2 combines tools to strengthen activity planning and students’ autonomous learning. On the other hand, Teacher 3 highlights the usefulness of AI in optimizing administrative and assessment tasks.

These results align with those found by Mohebi (2025); in their study, teachers referred to applications such as Khan Academy and Duolingo for their features that adapt to students’ levels, and they also highlighted the use of immersive AI, such as virtual reality and augmented reality. The analysis shows that, although ChatGPT is the predominant tool, teachers adapt its use to meet different needs, reflecting a practical and varied integration of AI into the educational process.

**Table 13**

*Digital Teaching Competencies: Personalized Teaching through AI*

<b>Indicators</b>	<b>Teacher 1</b>	<b>Teacher 2</b>	<b>Teacher 3</b>
	Yes, it could promote meaningful learning because students can put what they’ve learnt into practice.	Yes, especially with high school students, because they can practice and improve their language skills by simulating real-life scenarios.	Yes, AI has the potential to work primarily with adolescents, but it may not be as useful with children.
Personalized teaching	Design activities and create specific study plans for each student.	Adjust exercises for each student.	Personalizing activities based on age and English proficiency level.
	BGU students could practice their skills without the presence of a native speaker.	It could facilitate spoken and written conversation practice and even provide immediate feedback.	High school students could be exposed to real-world situations.

Regarding the dimension of AI Applied to Education, four indicators were considered. For the Personalized Teaching indicator, three questions were asked. Question 6: “Do you

believe that the use of AI promotes more meaningful learning in contrast to traditional methods?” was posed to assess the teacher’s opinion on the impact of AI on learning quality compared to traditional methods. The responses reveal a general consensus that AI has the potential to foster meaningful learning, especially when working with adolescent students. Furthermore, considering what the three teachers expressed, AI could be ideal for developing practical and linguistic skills.

There is a general consensus to innovate teaching methods, indicating that education should incorporate technological advances, such as AI, and promote a student-centered approach that empowers learners to take ownership of their learning while boosting their enthusiasm and motivation (Kalra, 2024). Consequently, for AI to be effectively integrated to achieve meaningful learning, teachers must maintain the initiative to modernize their methodologies.

Besides, question 7: “How do you use or would you use AI to personalize your teaching?” was designed to identify the teacher’s ability to adapt the use of AI to meet students’ individual needs. Responses vary slightly in terms of the specific application of these tools, although there is consensus on AI’s ability to facilitate personalization.

These results contrast with those of Zainuddin (2024); in his research, teachers also highlighted AI’s broad adaptability, referring to the ease with which content is progressively adjusted to students’ levels and the assistance it provides in formative feedback processes. However, the author also noted that AI may hinder the development of social skills and critical thinking by limiting collaborative learning opportunities. Consequently, it can be said that teachers recognize AI’s potential and versatility as a pedagogical tool for addressing students’ individual differences and enhancing their learning; however, a cautious stance should be maintained to ensure that technology does not replace human instruction by teachers.

Next, question 8: “How do you think AI could improve the English language teaching-learning process for BGU students?” was formulated to explore AI’s potential to enhance English learning in a specific age group, according to the teacher’s perspective. Although the responses agree on AI’s ability to provide practice opportunities, each teacher’s approach differs slightly. For example, Teacher 1 highlighted that AI could help overcome limitations in the educational context, such as the lack of native speakers; Teacher 2 underscored AI’s interactive role and its practical use for providing feedback. Teacher 3

orientated their response towards authentic learning by exposing students to real-life situations.

The results obtained show that there is a tendency to turn to AI to simulate authentic interactions and enable students to improve their communicative skills. In contrast, Yang’s (2024) study highlights that AI can analyze students’ learning characteristics, enabling the identification of strengths and weaknesses and the design of a unique plan for each student to improve their English language skills and achieve the proposed objectives. Yang uses the analysis of writing activities as an example, noting that AI can automatically detect errors and issues in the text; likewise, teachers and students would immediately receive suggestions to refine their writing in a foreign language. In general, it can be said that there is a consensus on the value of AI in various pedagogical applications, demonstrating its flexibility and potential to adapt to the different contexts and activities required or designed by the teacher.

**Table 14**

*Digital Teaching Competencies: AI-Powered Content Creation*

<b>Indicators</b>	<b>Teacher 1</b>	<b>Teacher 2</b>	<b>Teacher 3</b>
	Create activities and use AI as an assistant to reinforce the content studied in class.	Generate quizzes and exercises to reinforce vocabulary and grammar topics.	Design attractive materials.
Content Creation	Manual review, which could be considered a disadvantage as it makes it impractical.	Manual review, comparing AI-generated content with reliable resources.	Manual review based on relevance and alignment with learning objectives and the educational context.
	Manual content review: verify that the AI-generated activities align with what was planned.	Compare the generated materials with the curriculum standards and adjust any inconsistencies.	Adapt or combine AI-generated content with existing resources, such as books.

For the Content Creation indicator, three additional questions were asked. Question 9: “How do you use or would you use AI to create educational content for teaching English?”

was asked to assess the teacher's competence in designing instructional materials and resources using AI. The responses share a common focus: optimizing resource creation, although each interviewee mentioned a specific objective. Teacher 1 highlighted the role of AI as a support tool to complement and consolidate learning in the classroom. Teacher 2 responded in a more technical and precise manner, reflecting an emphasis on specific areas of learning English as a foreign language. For his part, Teacher 3 highlighted AI's creative potential to capture interest through dynamic resources.

Likewise, Mohebi (2025) highlights that AI can increase student interest by creating online materials that cater to different learning styles. Overall, teachers recognize the value of AI in creating personalized, effective, and engaging content that contributes to improving the educational experience.

As for question 10: "How do you assess or would you assess the quality and accuracy of AI-generated content before using it in class?", it was posed to analyze how teachers verify the reliability and suitability of AI-generated resources before implementing them in their practice. The approach is common across the responses; all interviewees mentioned that manual review is the best way to ensure the quality and accuracy of materials generated by AI. Each teacher's experience is reflected in the slight discrepancies evident in the responses. As for this, Teacher 1 mentioned a limitation in terms of efficiency, since verifying whether the content is appropriate for the target group could take time. For his part, Teacher 2 indicated that he compares the generated materials with existing ones whose reliability has already been verified, thereby correcting any errors that may arise. Finally, Teacher 3 also considers the aspects of the current curriculum to verify their relevance to the syllabus.

Considering this, Kalra (2024) agrees that, to increase the validity of AI-generated educational content, it should be compared with reliable sources. As can be seen, the most relevant finding is that manual review remains the primary method for ensuring content accuracy, so if a teacher wants to integrate AI into their classes, they must approach this technology with a highly critical eye to ensure it is effective in the teaching-learning process.

Additionally, question 11: "How do you ensure or would you ensure that AI-generated content aligns with curriculum objectives?" sought to identify the teacher's ability to link AI-generated materials to the standards and objectives outlined in the current Ecuadorian curriculum. Based on the analyzed responses, it is clear that teachers review and adapt

content to align it with curricular objectives, although each uses their own specific methods. For example, Teacher 1 relies on manual review to ensure that the AI-generated material aligns with the intended objectives. Teacher 2 compares the generated content with what is stipulated in the regulations. Likewise, Teacher 3 adapts the information to the existing content and, when possible, combines it, thereby integrating both materials: the AI-generated content and traditional resources.

According to Muñoz-Basols and Fuertes-Gutiérrez (2024), before planning the pedagogical implementation of AI in the English classroom, teachers must align it with learning objectives and precisely define its role by establishing clear usage pathways. Consequently, considering the analysis of the results, it can be understood that teachers are committed to ensuring that AI-generated materials are relevant to the current curriculum through a variety of methods and strategies.

**Table 15**

*Digital Teaching Competencies: Task Automation with AI*

<b>Indicators</b>	<b>Teacher 1</b>	<b>Teacher 2</b>	<b>Teacher 3</b>
	It could be quite useful for creating activities and improving teaching.	It is very useful for automating tasks and improving teaching efficiency. Additionally, it allows the teacher to optimize their time.	It is an innovative tool and can be very useful for innovating in the classroom, although its use should be balanced.
Task Automation	Useful for creating assessments and as support during review and grading. Additionally, it contributes to grade recording.	Useful for grading simple assessments and generating progress reports.	Useful for generating simple assessments, recording grades, and providing feedback, although caution should be exercised to ensure it doesn't replace the teacher.

For the Task Automation indicator, two additional questions were included: question 12, “How useful do you consider AI to be in current educational processes?” was posed to explore teachers’ general perception of the value of AI in contemporary education. The responses show that the interviewees agree that AI is a useful tool. The discrepancies are

solely centered on the different contributions this technology could make. Consequently, Teacher 1 highlighted AI's potential to enrich teaching. In contrast, Teacher 2 referred to time optimization; that is, relieving the administrative burden faced by teachers. Finally, Teacher 3 was more cautious and pointed out that the use of AI should be balanced.

Education and technology have been refined over time, placing the student at the center of learning and society. For this reason, contemporary education requires language teachers to adopt a different, innovative mindset, with an international perspective and technological awareness (Yang, 2024). Consequently, it is critical that teachers do not view AI as an enemy in the classroom but rather as a useful tool that can be leveraged to great advantage for their teaching and their students' learning. In connection with this, the results obtained allow us to conjecture that AI is practical for teachers and can even transform education in a positive way. However, it is also recognized that technology cannot do all the work, and teacher intervention is essential for AI to serve as a complementary tool rather than an attempted substitute.

Regarding question 13: "How do you use or would you use AI to automate tasks in your teaching practice?", it was formulated to understand how the teacher leverages AI to improve efficiency in their work. In this regard, all three interviewees agree that AI is useful for creating simple assessments and recording grades. Additionally, each teacher has contributed some additional ideas. For example, Teacher 1 indicated that AI can be used to grade assessments. For his part, Teacher 2 introduced the idea of generating reports using AI, which could have implications for tracking student performance. Finally, Teacher 3 added that feedback can be provided and reiterated that, if not integrated properly, AI could replace the teacher's role. AI's versatility in teaching practice makes it a technology with significant advantages.

Authors such as Yang (2024) agree that AI facilitates processes such as feedback; however, they also emphasize that, through natural language processing and machine learning techniques, AI is even capable of analyzing students' behavior and habits to simplify the identification of specific needs and potential problems. Considering these results, it can be reasoned that AI can automate various teacher tasks, allowing them to focus on pedagogical aspects and their students. Furthermore, the usefulness of AI in the process of evaluating learning and behavior is highlighted, although it must be handled with caution because if AI were to replace the human value of teachers, evaluations could be poorly designed; grading could overlook aspects that only a human could perceive;

feedback would lose its human touch and fail to be meaningful to students; and even the generation of reports to track student progress could, for example, be superficial.

**Table 16**

*Digital Teaching Competencies: Educational Inclusion*

<b>Indicators</b>	<b>Teacher 1</b>	<b>Teacher 2</b>	<b>Teacher 3</b>
Educational inclusion	Perform universal activities such as games.	Design accessible activities for students who require curricular adaptations.	Personalize teaching whenever possible; perhaps AI isn't suitable for every situation, given the educational context.

Finally, for the Inclusion indicator, only question 14: “How do you use or would you use AI to promote inclusion in the classroom?” was asked to assess the teacher’s ability to implement AI for the purposes of equity and universal learning. The responses, although different in scope and focus, agree that AI has the potential to generate strategies that promote inclusion. Teacher 1 highlighted AI’s ability to universalize activities. Teacher 2, for his part, emphasized that students who require curricular adaptations, whether or not related to disabilities, could benefit from AI when activities are designed to be accessible to them. Finally, Teacher 3 was more critical and highlighted the limitations of AI in educational contexts that could be more complex.

Likewise, in the study by Alenizi et al. (2023), teachers shared valuable insights into the use of AI in language teaching framed by the inclusion of students with specific educational needs; these insights include strategies that provide personalized and adaptable learning experiences, promoting interaction and social and emotional growth. Considering these responses, it is possible to say that teachers generally agree that AI can promote inclusion by facilitating the adaptation of various activities. However, it is also clear that the educational context and the inherent limitations of technology must be taken into account. AI cannot be the answer to everything, although it can be integrated to promote more equitable teaching; teachers should be prudent and use AI only when it is genuinely beneficial.

**Table 17***Digital Teaching Competencies: Ethical Use of AI in Education*

<b>Indicators</b>	<b>Teacher 1</b>	<b>Teacher 2</b>	<b>Teacher 3</b>
	No formal AI training, but there is a willingness to undergo it.	Self-taught. No formal AI training, but a willingness to pursue it with a focus on inclusion.	Training received during postgraduates' studies; there is a desire to delve deeper.
	Don't rely on AI; combine its use with own activities.	Use tools with clear privacy policies and explain the risks of using them to students.	Promote responsible use by reviewing the implications of each tool.
Ethical Use of AI	In general, students can develop skills to correct or translate texts and communicate better in another language.	Students are critical and evaluate the information provided by AI to avoid fake news.	Students are familiar with AI. Although it's easy for them, perhaps they don't understand that there are also risks of dependency.
	Limited resources for teachers and students, poor infrastructure, and a general lack of awareness of AI.	Lack of access to devices and connectivity. Additionally, the internal policies of educational institutions.	Teachers' lack of knowledge. Sometimes, students know more about AI than their teachers do.

Regarding the AI Ethics dimension in Education, one indicator was considered: Ethical Use of AI. Consequently, four questions were asked to conclude the administration of the instrument. Question 15: "Have you received any academic training in AI? If so, could you explain it? If not, what aspects of AI would you like to be trained in?" was formulated to determine the level of AI training and the areas of interest for improving their knowledge. The respondents' answers reveal different levels of training and show a willingness to expand their knowledge. About this, Teacher 1 admitted to not having received any formal training, although it is evident that he has used it in his classes and in his daily life; he also has a constant interest in learning more and discovering

everything about AI. Likewise, Teacher 2 perceived himself as self-taught; that is, he has learnt everything he knows about AI on his own; he also expressed his desire to deepen his learning in terms of inclusion. Finally, Teacher 3's response reflects a personal commitment to perfecting their knowledge.

These results reflect the importance of receiving training on the proper use of AI. In line with this, Zainuddin (2024) indicates that the effective integration of AI in classrooms requires specific knowledge and skills to avoid poor implementation. Therefore, the results suggest that teachers are interested in training on AI topics and, although they have not received formal training, they demonstrate a commitment to improving their teaching, which underscores the need for educational authorities to provide ongoing professional development programs to keep teachers up to date.

With regard to question 16: "How do you ensure or would you ensure that you use AI ethically and responsibly in your teaching?", it was posed to identify the teacher's approach to guaranteeing the ethical and responsible use of AI in the classroom. The interviewees showed a shared commitment to using AI ethically, although each has employed their own strategies. Thus, Teacher 1 emphasized that it is necessary to maintain a balance between using new technologies and employing one's own methodologies to avoid dependence. Then, Teacher 2 indicated that he prefers to warn students and adopts a preventive approach to digital ethics. Finally, Teacher 3 expressed concern about students' lack of awareness and the excessive use of AI.

These results align significantly with those of Mohebi (2025), who notes that teachers fear AI will violate student privacy and that algorithms will reinforce biases to the detriment of education. The analyzed responses indicate that there is a consensus on the need to integrate AI ethically and responsibly in the classroom. On the one hand, a balanced pedagogical perspective must be considered, and on the other, students must be encouraged to adopt a critical and reflective approach through which they can recognize potential benefits and risks.

Question 17: "How do you think AI can contribute to the development of students' digital English language competencies?" was designed to analyze teachers' perceptions of how AI can support both English language learning and students' technological skills within an ethical framework. The responses agree that AI can strengthen students' technological and linguistic skills. First, Teacher 1 emphasized that AI strengthens practical skills directly related to learning English; this is linked to communication and collaboration in

digital environments. On the other hand, Teacher 2 indicated that students develop their critical thinking when using this technology. Teacher 3, on the other hand, adopted a cautious approach, recognizing that students have not developed the competencies to identify the risks associated with the use of emerging technological tools.

For their part, studies such as Kalra's (2024) suggest that AI can foster a more resilient and adaptive educational framework; that is, teaching in which students can acquire knowledge while enhancing the skills needed to live in a technologically advanced society. Thus, teachers have considerable concerns about the need to educate students in such a way that they develop their digital competencies adequately so that they use AI responsibly.

Finally, question 18: "What challenges do teachers face when using AI in their classes?" was posed to identify the difficulties and barriers teachers perceive when implementing AI in educational contexts. Consequently, it was found that Teachers 1 and 2 converge in citing the lack of resources at the educational institution as the most significant obstacle to integrating AI into their work. Teacher 3, for his part, cited lack of knowledge as the main challenge for teachers; Teacher 1 also agrees with this idea.

From this standpoint, Wong et al. (2025) found a dichotomy between teachers' enthusiasm for the potential of AI and the challenges of implementing it: a lack of adequate training and resources. Consequently, it can be stated that, in the Ecuadorian context, there are significant barriers to implementing AI as an everyday resource in classrooms. These challenges are exacerbated in rural contexts, so it is indispensable to invest in equipping schools with technological resources and in training programs to ensure that knowledge of AI use is properly orientated towards achieving curricular objectives and that education meets quality standards.

#### **4.3. Design of an activity guide based on the use of artificial intelligence to reinforce English writing skills in second-year BGU students at the Unidad Educativa Fiscomisional Santa Catalina Labouré.**

Once the assessment of teachers' English writing and digital competencies was completed, the AI-based activity guide was designed to enable students to reinforce the process and production of written texts under the teacher's guidance. For this reason, simple activities were designed so that, regardless of their level of training or experience, teachers would be able to implement them in their classes.

## CHAPTER V

### PROPOSAL

#### 5.1. Title

Activity guide based on the use of artificial intelligence to reinforce English writing skills in second-year BGU students at the Unidad Educativa Fiscomisional Santa Catalina Labouré.

#### 5.2. Introduction

Writing in English is an essential skill for the academic and professional development of students in Ecuador; however, it also poses a considerable challenge for both the students themselves and the teachers responsible for guiding their development. Often, the main difficulties center on areas such as coherence, cohesion, appropriate vocabulary use, grammar, and the structuring of ideas in a text. Consequently, the integration of new technologies into education is transforming traditional teaching methods, offering new opportunities to Personalize learning and reinforce specific skills.

However, despite technological advances, the integration of AI tools into the language teaching and learning process is limited, especially in educational contexts where teachers lack training in emerging technologies. For this reason, this activity guide aims to address these needs by enabling students and teachers to effectively use AI tools to improve their English writing. In this way, it is possible to promote autonomous, personalized, and motivating learning.

For the design of this activity guide, various generative artificial intelligence tools have been selected. This is because, with the rise of this technology, teachers can use AI-generated content to create learning experiences focused on addressing diversity in the classroom; for example, materials can be adjusted based on students' performance and interests (Nartey, 2025). By addressing students' diverse educational needs, the integration of AI into English language teaching would align with the principles of Universal Design for Learning, which, according to the Ministerio de Educación's 2021 Universal Design for Learning Guide, "proposes flexibility in the ways information is presented, in how students respond or demonstrate their knowledge and skills, and in how they are motivated and engaged in their own learning" (p. 7). In this way, there is the possibility that existing gaps and challenges can be overcome so that all students can develop their English language skills.

Finally, the activities are aligned with the current Ecuadorian curriculum, which details the high school graduation profile and takes into account the Common European Framework of Reference for Languages (CEFR). Likewise, to facilitate the integration of the proposed activities, the Prioritized Curriculum with an emphasis on communication, mathematical, digital, and socio-emotional competencies issued in 2021 by the Ministry of Education of Ecuador has been taken into account, through which it is intended to meet current educational needs by prioritizing key life skills. Specifically, the writing curriculum thread prioritizes communication and digital competencies. The former refer to the skills of understanding and producing texts of all kinds and in any communicative situation; while the latter correspond to the set of knowledge and skills that facilitate the responsible use of technology and the development of computational thinking; that is, students take on the role of analyst and creator, rather than merely being consumers of technology (Ministerio de Educac, 2021). In this way, students can strengthen their writing skills and develop other competencies that are important for their holistic development.

### **5.3. General Objective**

Integrate artificial intelligence into reinforcing English writing skills for second-year BGU students in accordance with the Ecuadorian curriculum and the Common European Framework of Reference for Languages (CEFR).

### **5.4. Methodological Guidelines**

This guide presents 18 activities based on the use of AI to reinforce English writing skills. The first ten activities focus on writing as a process, and the remaining eight focus on writing as a product. Likewise, free AI tools have been used to avoid accessibility barriers.

Additionally, the activities have been designed to fit into the micro-curricular plans developed by the teachers. In this way, they will be able to integrate and adapt them into their classes according to methodological needs. For this reason, the ERCA learning cycle (Experience, Reflection, Conceptualization, Application) has been chosen, which is an active methodology widely used in classrooms. Additionally, the aim is for learning to be student-centered and to foster opportunities for developing critical thinking and creativity through reflection in each activity. In English teaching, the ERCA cycle promotes the acquisition of language skills by articulating thought and language in authentic situations

(Borja-Fares et al., 2025). This is key for students to effectively improve their communication skills.

Additionally, color-coded icons have been placed in the activity guide to identify the UDL principles in each activity. In this way, the teacher will be able to recognize how to meet the specific needs of their students. The principle of Representation (🟡) refers to the different ways in which information is presented (visual, auditory channels, etc.). The Engagement principle (🟢) is about the multiple ways in which student interest can be generated. Finally, the Engagement: Expression and Action (🟠) component concerns the various ways in which students can express themselves and carry out the activities.

On the other hand, throughout the activities, emphasis is placed on the guidance that the teacher should provide during task completion, directing each step towards reflection and critical thinking about the use of AI in writing activities. It is necessary to consider that teachers must reflect on the impact of their pedagogical decisions on preparing their students to adapt to a constantly evolving environment (García-Pérez, 2024). For this reason, when implementing this activity guide, the teacher must constantly support their students so that they understand the real implications of AI in various aspects of their lives and achieve an appropriate level of autonomy framed by the ethical use of technology.

## **5.6. Limitations**

For the development of this activity guide, various AI tools have been considered that are either completely free or offer basic features that do not require a paid plan. Sometimes, it is only necessary to create an account on the site. For this purpose, an email address is required. However, due to the nature of the activities, some technological resources will be necessary to achieve optimal implementation in English classes, primarily computers or other smart devices.

However, it should be considered that the implementation of technology in the teaching-learning process is essential for students to develop their digital competencies while honing their communication skills, so having limited resources does not mean it is impossible to integrate AI into English as a foreign language classes. Based on this, the teacher should adapt this guide based on the available resources, their students' level of digital literacy, and the overall institutional conditions.

## 5.7. List of Activities

### *Activities to Improve Writing in English as a Process:*

<b>Activity 1.</b>	Developing ideas with Miro	}	<i>to reinforce the pre-draft stage</i>
<b>Activity 2.</b>	Developing ideas with ChatGPT		
<b>Activity 3.</b>	Collaborative writing with ChatGPT	}	<i>to reinforce the draft stage</i>
<b>Activity 4.</b>	Starting Stories with ChatGPT		
<b>Activity 5.</b>	ChatGPT as an outline assistant	}	<i>to reinforce the review stage</i>
<b>Activity 6.</b>	Paragraph reordering game in Copilot		
<b>Activity 7.</b>	Polishing the writing with Grammarly	}	<i>to reinforce the editing stage</i>
<b>Activity 8.</b>	Rewriting and paraphrasing in QuillBot		
<b>Activity 9.</b>	Controlling the tone with Gemini	}	<i>to reinforce the publication stage.</i>
<b>Activity 10.</b>	Debating and arguing with ChatGPT		

### *Activities to Reinforce Writing in English as a Product:*

<b>Activity 11.</b>	ChatGPT-assisted idea development	}	<i>to reinforce the content dimension</i>
<b>Activity 12.</b>	Checking relevance with ChatGPT		
<b>Activity 13.</b>	Writing dialogues in Character.AI	}	<i>to reinforce the communicative achievement dimension</i>
<b>Activity 14.</b>	Evaluating Purpose with ChatGPT		
<b>Activity 15.</b>	Mapping essays generated by ChatGPT	}	<i>to reinforce the organization dimension</i>
<b>Activity 16.</b>	Cohesion Analysis in Gemini		
<b>Activity 17.</b>	Syntactic refinement with Grammarly	}	<i>to reinforce the language dimension.</i>
<b>Activity 18.</b>	Improving vocabulary with QuillBot		

## 5.8. Development of Activities

### *Activities to reinforce the Preliminary Draft stage*

#### **Activity 1:**

Developing ideas with Miro

#### **Objective of the Activity:**

Generate and visualize a wide range of ideas around a topic.

#### **Suggested Artificial Intelligence Tool:**

Miro

<https://miro.com/>



Free AI with paid subscription options suitable for brainstorming and mind mapping.

An account must be created even on the free plan. Therefore, access to an email address is needed.

The free option has enough features, although they are limited.



#### **Curricular Objective:**

O.EFL 5.4 Deploy a range of learning strategies, thereby increasing disposition an ability to independently access further (language) learning and practice opportunities. Respect themselves and others within the communication process, cultivating habits of honesty and integrity into responsible academic behavior.



#### **Assessment Criteria:**

CE.EFL.5.14. Identify, critically evaluate and recommend a variety of potential resources and references, including digital tools that support collaboration and productivity, for educational and academic use.

#### **Skills and Performance Descriptors to be Evaluated:**







EFL 5.4.1. Critically evaluate information from references, including those found on the web, and recommend print and digital sources to other learners.  

#### **Indicators for the Performance Criteria:**

I.EFL.5.14.1. Learners can identify, critically evaluate and recommend a variety of potential resources and references, including digital tools that support collaboration and productivity, for educational and academic use. (I.1, I.2, S.3, S.4)  

#### **Methodology:**

##### **Experience**

- Students propose topics of interest to them. The teacher can guide their students so that the topics align with the content being reviewed. 
- The teacher presents examples of mind maps. 
- Students create a central topic on Miro. 
  - o For example: “Changes in the future”, “Technology in our lives”, “A life-changing moment”, etc.
- Using Miro’s built-in brainstorming tool, students generate ideas, questions, scenarios, emotions, etc. 
- The AI will automatically generate a mind map. 
- Students Personalize their mind maps by adding Colors and images. 

- The teacher can also allow students to replicate the AI-generated mind maps on paper or in other digital tools. ●

### Reflection

- Students review their mind maps and identify the ideas that, in their opinion, are most significant or creative, in order to develop them further in a writing assignment. ●
- Students will work with two or three branches of the mind map containing the chosen ideas. For this, they must justify their choice with annotations such as: “I chose idea X because...”, “I connect idea X with idea Y because...”, “I could write about idea X because...”, etc. ●
- The teacher may allow the student to take notes by hand or on a computer, record voice notes, or engage in collaborative discussions. ●

### Conceptualization

- The teacher presents cases of how mind maps help with writing. ●
  - For example: how writers use groups of ideas to develop essays, stories, or reflections.
- The teacher can also use one of their students’ mind maps. ●
- The teacher asks their students to look at their mind maps and identify the branches that can be developed into longer texts, such as stories or essays. ●
- Students identify a branch of their mind maps that can be used to develop a more complex piece of writing. They share their ideas in class or in work groups. ●

### Application

- Students choose a branch of their mind map and use it as a basis to begin prewriting. ●
  - For example: creating a story outline, bullet points for an opinion essay, or a personal anecdote structure.
- The teacher presents examples of writing outlines so that students can plan their work. ●
- Students begin the prewriting process by creating their outlines by hand or on a computer. ●
- Students share their outlines in class. ●
- The teacher can use peer assessment through collaborative discussions, written comments on the Miro platform itself, or written annotations. ●

### Color-coding to Identify the UDL Principles in Activities

Engagement	●	Provide multiple means of engagement.
Representation	●	Provide multiple means of representation.
Action and Expression	●	Provide multiple means of action and expression.

## Activity 2:

Developing ideas with ChatGPT

### Objective of the Activity:

Facilitate the creation and development of ideas for writing essays.

### Suggested Artificial Intelligence Tool:

ChatGPT

<https://chatgpt.com/>



Free AI with paid subscription options, suitable as a chatbot and virtual assistant.

An account is not needed to access its basic features. However, it is recommended to access the free plan by creating an account, so it is important to have access to an email address.

The free option has enough features, although they are limited.



### Curricular Objective:

O.EFL 5.4 Deploy a range of learning strategies, thereby increasing disposition an ability to independently access further (language) learning and practice opportunities. Respect themselves and others within the communication process, cultivating habits of honesty and integrity into responsible academic behavior.



### Assessment Criteria:

CE.EFL.5.14. Identify, critically evaluate and recommend a variety of potential resources and references, including digital tools that support collaboration and productivity, for educational and academic use.

### Skills and Performance Descriptors to be Evaluated:






EFL 5.4.1. Critically evaluate information from references, including those found on the web, and recommend print and digital sources to other learners.  

### Indicators for the Performance Criteria:

I.EFL.5.14.1. Learners can identify, critically evaluate and recommend a variety of potential resources and references, including digital tools that support collaboration and productivity, for educational and academic use. (I.1, I.2, S.3, S.4)  

### Methodology

#### Experience

- Students propose topics of interest to them for writing essays. The teacher can guide their students so that the topics align with the content being reviewed. 
- The teacher presents examples of essay topics appropriate for their students' age. 
  - o For example: “*Should telephones be allowed in classrooms?*”.
- Students create a basic outline that includes some relevant ideas, such as the thesis and its supporting points. 
- The teacher presents examples of basic outlines for planning essay writing using diagrams, graphic organizers, etc. It is possible to use text readers or predictive keyboards to provide accessibility for students with specific educational needs. 
- Students can create their outline by hand or on a computer. 

## Reflection

- By using ChatGPT, students interact by writing their thesis and asking the AI for suggestions on how to expand their ideas. ●
  - It is suggested to use the prompt: *“I am writing an essay on .... My thesis is .... Help me to expand my ideas. I would like: three arguments to support my thesis, concrete examples or real situations and a possible counter-argument”*.
- ChatGPT generates the ideas. Text readers can be used. ●
- Students compare their own outlines with the suggestions provided by the AI. ●
- Students reflect on the new perspectives they have discovered. ●
  - The teacher can guide students’ reflections by saying: *“A new idea I found is...”*, *“This idea changed my point of view because...”*.
- Reflection can be carried out orally or in writing, individually or in pairs. ●

## Conceptualization

- The teacher presents the structure of a paragraph that includes a topic sentence, supporting sentences, examples, a counterargument, and a conclusion. Several well-constructed paragraph models can be used. ChatGPT can also be used to generate a model paragraph and then present it to students. Text readers can be used to provide accessibility for students with specific educational needs. ●
  - The following prompt can be used: *“Write an effective paragraph containing the topic sentence, supporting sentences, examples, counterargument and conclusion about ... using vocabulary at the level ...”*.
- The teacher can also present the model with annotations and Colors that allow the elements in the paragraph to be differentiated. ●

## Application

- Students review and modify their outlines to begin the first draft. ●
- Students begin writing the first draft by creating their outlines by hand or on a computer. ●
- Students share their writing in class as a presentation or in pairs. ●

## Color-coding to Identify the UDL Principles in Activities

Engagement	●	Provide multiple means of engagement.
Representation	●	Provide multiple means of representation.
Action and Expression	●	Provide multiple means of action and expression.

## Activities to Reinforce the Draft Stage

### Activity 3:

Collaborative writing with ChatGPT

#### Objective of the Activity:

Write a full paragraph or essay section with AI assistance.

#### Suggested Artificial Intelligence Tool:

ChatGPT

<https://chatgpt.com/>



Free AI with paid subscription options, suitable as a chatbot and virtual assistant.

An account is not needed to access its basic features. However, it is recommended to access the free plan by creating an account, so it is important to have access to an email address.

The free option has enough features, although they are limited.

#### Curricular Objective:

O.EFL 5.4 Deploy a range of learning strategies, thereby increasing disposition an ability to independently access further (language) learning and practice opportunities. Respect themselves and others within the communication process, cultivating habits of honesty and integrity into responsible academic behavior.

#### Assessment Criteria:

CE.EFL.5.14. Identify, critically evaluate and recommend a variety of potential resources and references, including digital tools that support collaboration and productivity, for educational and academic use.

#### Skills and Performance Descriptors to be Evaluated:

EFL 5.4.4. Select and make effective use of a range of digital tools to write, edit, revise and publish written work in a way that supports collaboration, learning and productivity. (Example: image editing, GoogleDrive, infographic makers, audio and video editing, presentation apps, etc.).

#### Indicators for the Performance Criteria:

I.EFL.5.14.1. Learners can identify, critically evaluate and recommend a variety of potential resources and references, including digital tools that support collaboration and productivity, for educational and academic use. (I.1, I.2, S.3, S.4)

#### Methodology

##### Experience

- The teacher presents ChatGPT as a collaborative writing assistant through examples, worksheets, videos, etc.
- The teacher asks their students to write a draft of an introductory paragraph on a specific topic. Students can write it by hand, on a computer, or even using the dictation feature.
- Students ask ChatGPT for suggestions to review and edit their writing in real time using AI-generated information.
  - o Students can use the prompts: “Review this paragraph and suggest possible changes to improve clarity and coherence”, “Help me edit this sentence to make it more concise and effective”, “I am trying to convey

*this idea... suggest a more precise way of expressing it”, “Suggest alternative transitions between these ideas...”, etc.*

- Students polish their work with AI-generated suggestions. It is recommended to underline the ideas that were edited. Writing can be done by hand, on a computer, or even using the dictation feature. ●

### Reflection

- After the collaborative writing experience, students reflect on how AI helped or hindered their work. ●
  - To guide reflection, the teacher can use the following questions: “*How did the AI's suggestions help or hinder your ideas?*”, “*Did the AI's input enhance or detract from your writing voice?*”, “*Were there any surprises or difficulties in working with the AI?*”, “*How did the collaborative process influence your understanding of the topic or the writing process?*”, etc.
- The teacher asks students to write their reflection in a journal entry. It can be written by hand, on a computer, or even using the dictation feature. They can also share their reflections with their classmates to foster collaborative discussion spaces for identifying areas where AI was useful or not. ●

### Conceptualization

- The teacher explains that writing is a process that evolves through interaction with information from various sources, including that shared among peers. Infographics, authentic examples, videos, etc. can be used. ●
  - Some points to internalize from the experience include how AI-generated suggestions can improve writing without causing students to lose their voice and identity.

### Application

- Students independently write a complete introductory paragraph that demonstrates a full understanding of the writing process. It can be written by hand, on a computer, or even using the dictation feature. ●
- The teacher guides students’ work by providing feedback and suggestions for improvement. ●
- Students present their work to their peers or to the teacher, who evaluate criteria such as clarity, coherence, organization, and overall writing quality. Evaluation can be carried out using a rubric or through collaborative discussions. ●

### Color-coding to Identify the UDL Principles in Activities

Engagement	●	Provide multiple means of engagement.
Representation	●	Provide multiple means of representation.
Action and Expression	●	Provide multiple means of action and expression.

#### Activity 4:

Starting Stories with ChatGPT

#### Objective of the Activity:

Stimulate creativity and descriptive writing through AI-generated visual prompts.

#### Suggested Artificial Intelligence Tool:

ChatGPT

<https://chatgpt.com/>



Free AI with paid subscription options, suitable as a chatbot and virtual assistant.

An account is not needed to access its basic features. However, it is recommended to access the free plan by creating an account, so it is important to have access to an email address.

The free option has enough features, although they are limited.


#### Curricular Objective:

O.EFL 5.4 Deploy a range of learning strategies, thereby increasing disposition an ability to independently access further (language) learning and practice opportunities. Respect themselves and others within the communication process, cultivating habits of honesty and integrity into responsible academic behavior.


#### Assessment Criteria:

CE.EFL.5.14. Identify, critically evaluate and recommend a variety of potential resources and references, including digital tools that support collaboration and productivity, for educational and academic use.

#### Skills and Performance Descriptors to be Evaluated:




EFL 5.4.4. Select and make effective use of a range of digital tools to write, edit, revise and publish written work in a way that supports collaboration, learning and productivity. (Example: image editing, GoogleDrive, infographic makers, audio and video editing, presentation apps, etc.). 

#### Indicators for the Performance Criteria:

I.EFL.5.14.1. Learners can identify, critically evaluate and recommend a variety of potential resources and references, including digital tools that support collaboration and productivity, for educational and academic use. (I.1, I.2, S.3, S.4) 

#### Methodology

##### Experience

- The teacher presents the text-to-image generation feature integrated into ChatGPT. It is possible to use infographics, videos, practical examples, etc. 
- Students generate one or more unique images based on what they write. The dictation feature can also be used. If necessary, the teacher can suggest prompts to align with the content being reviewed. 
  - o Some examples of prompts could be: “*food in the year 3000*”, “*a robot at the bottom of the ocean*”, “*a floating city*”, etc.
- The teacher guides the activity, fostering creativity and imagination to create unique images with striking visual details. 

## Reflection

- Students review the AI-generated image and list the details they can observe or those they imagined before generating the image. Mind mapping or brainstorming techniques can be used. ●
- Students begin the writing process by creating their first draft, in which they describe the details they observe or imagine. Students are encouraged to write a short descriptive paragraph of no more than 100 words, although the teacher may adjust the word count as needed. The dictation tool can be used. ●

## Conceptualization

- The teacher creates a space for collaborative discussion on how to improve the written paragraphs. ●
  - The discussion could focus on the use of figurative language such as metaphors, the use of adjectives and adverbs, adding causes and consequences, and working on the narrative tone.
- It is recommended that the teacher present examples of descriptive texts or use a student's paragraph to illustrate strategies for improving descriptive writing. ●
- Students take notes on the agreed-upon strategies by hand or on a computer. The dictation feature can also be used. ●

## Application

- Students apply the strategies that emerged from the discussion and rewrite their paragraphs, extending the word count to 200 or 250. However, the teacher may adjust the text length as needed. The dictation function can be used. ●
- The teacher guides and monitors the execution of the activity, providing individual or group feedback to improve writing. Emphasis should be placed on using figurative language, vocabulary, or phrases appropriate to their level and a tone that aligns with the qualities of descriptive texts. ●
- To motivate students, the enhanced images and descriptive paragraphs can be compiled into an anthology, either digitally or in print, for display in the classroom or another visible space. ●

## Color-coding to Identify the UDL Principles in Activities

Engagement	●	Provide multiple means of engagement.
Representation	●	Provide multiple means of representation.
Action and Expression	●	Provide multiple means of action and expression.

## *Activities to Reinforce the Review Stage*

### **Activity 5:**

ChatGPT as an outline assistant

### **Objective of the Activity:**

Improve the text structure using the AI outline.

### **Suggested Artificial Intelligence Tool:**

ChatGPT

<https://chatgpt.com/>



Free AI with paid subscription options, suitable as a chatbot and virtual assistant.

An account is not needed to access its basic features. However, it is recommended to access the free plan by creating an account, so it is important to have access to an email address.

The free option has enough features, although they are limited.



### **Curricular Objective:**

O.EFL 5.4 Deploy a range of learning strategies, thereby increasing disposition an ability to independently access further (language) learning and practice opportunities. Respect themselves and others within the communication process, cultivating habits of honesty and integrity into responsible academic behavior.



### **Assessment Criteria:**

CE.EFL.5.14. Identify, critically evaluate and recommend a variety of potential resources and references, including digital tools that support collaboration and productivity, for educational and academic use.

### **Skills and Performance Descriptors to be Evaluated:**



EFL 5.4.4. Select and make effective use of a range of digital tools to write, edit, revise and publish written work in a way that supports collaboration, learning and productivity. (Example: image editing, GoogleDrive, infographic makers, audio and video editing, presentation apps, etc.).  

### **Indicators for the Performance Criteria:**

I.EFL.5.14.1. Learners can identify, critically evaluate and recommend a variety of potential resources and references, including digital tools that support collaboration and productivity, for educational and academic use. (I.1, I.2, S.3, S.4)  

### **Methodology**

#### **Experience**

- For this activity, students must have a draft of a piece of writing ready. The teacher can choose the type of text (narrative, descriptive, expository, argumentative, etc.) that students must prepare, or let them do it freely. Additionally, the topic can be guided to align with the content being reviewed, or students can be allowed to write freely. However, it is recommended to focus on a single type of text so that students can practice with a specific structure at a time. 
- Students transcribe their texts into ChatGPT so that the AI can suggest options for structuring the writing. The dictation feature can be used. 

- The following prompt can be used: *“Can you create a brief outline or structure of this text?”*.
- ChatGPT generates a simple structure. For example, in an argumentative essay: introduction, argument 1, argument 2, argument 3, conclusion. Text-reading functions can be used. ●

### Reflection

- Before reviewing the outline suggested by ChatGPT, students should create their own outlines based on the previously written draft. This can be done on paper or digitally. ●
- Students compare both outlines by analyzing differences and similarities, gaps in their own work versus those in the AI-generated outlines, areas for improvement based on the AI’s suggestions, etc. This analysis can be carried out using graphic organisers or collaborative discussions. ●
- The teacher can guide reflection by asking: *“Are the main ideas in a logical sequence?”*, *“Are there any ideas that feel out of place or underdeveloped?”*, *“Is the pacing balanced, or are some sections too brief or overly detailed?”* ●

### Conceptualization

- The teacher reviews the structure of the text covered using infographics, videos, graphic organizers, etc. ●
- The teacher presents examples that demonstrate the appropriate structure of the text being studied, the use of connectors, transitions, and main sentences. Colors can be used to highlight each element. ●

### Application

- Students rewrite their outlines, incorporating the necessary changes to improve the structure of their writing. This can be done by hand or digitally. It is recommended to highlight the parts that have been improved. ●
- The teacher provides opportunities to reflect on the improvements made to the text’s structure. ●
  - Reflections should focus on: reorganizing paragraphs or sentences as necessary, clarifying transitions between ideas, and ensuring that each idea is related and doesn’t feel out of place.
- For the evaluation, students can discuss in pairs, focusing on the correct structuring of ideas in the writing. ●

### Color-coding to Identify the UDL Principles in Activities

Engagement	●	Provide multiple means of engagement.
Representation	●	Provide multiple means of representation.
Action and Expression	●	Provide multiple means of action and expression.

### Activity 6:

Paragraph reordering game in Copilot

### Objective of the Activity:

Practice paragraph cohesion.

### Suggested Artificial Intelligence Tool:

Microsoft Copilot

<https://copilot.microsoft.com/>



Free AI suitable for use as a chatbot and virtual assistant.  
No account is needed to access its basic features.


### Curricular Objective:

O.EFL 5.4 Deploy a range of learning strategies, thereby increasing disposition an ability to independently access further (language) learning and practice opportunities. Respect themselves and others within the communication process, cultivating habits of honesty and integrity into responsible academic behavior.


### Assessment Criteria:

CE.EFL.5.14. Identify, critically evaluate and recommend a variety of potential resources and references, including digital tools that support collaboration and productivity, for educational and academic use.

### Skills and Performance Descriptors to be Evaluated:



EFL 5.4.4. Select and make effective use of a range of digital tools to write, edit, revise and publish written work in a way that supports collaboration, learning and productivity. (Example: image editing, GoogleDrive, infographic makers, audio and video editing, presentation apps, etc.). 

### Indicators for the Performance Criteria:

I.EFL.5.14.1. Learners can identify, critically evaluate and recommend a variety of potential resources and references, including digital tools that support collaboration and productivity, for educational and academic use. (I.1, I.2, S.3, S.4) 

### Methodology

#### Experience

- Previously, the teacher must prepare texts, separate the paragraphs, and rearrange them.
  - o To do this, the following prompt can be used in Microsoft Copilot:  
“Scramble the paragraphs of the following text so I can use it for a sequencing activity”.
- Students receive the paragraphs separately and out of order. This can be done on paper or using digital tools for collaborative work, such as Google Docs or Jamboard. 
- Students work individually or in groups to reorder the paragraphs in the way they consider most logical. 

## Reflection

- Students justify the order in which the paragraphs have been arranged. This can be done through collaborative discussions or presentations. ●
  - The teacher can use these questions to guide the activity: *“What guided your choice?”*, *“What transitions, ideas or themes helped link the sections together?”*, *“How did you decide what the final paragraph of the text should be?”*.
- Students transcribe the paragraphs into Copilot and ask it to order them. The dictation feature can be used. ●
  - The following prompt can be used: *“Rearrange the following jumbled paragraphs into a logical order”*, *“Which paragraph should come first in this scrambled text, and why?”*
- Students compare their ordered texts with the AI-generated version, and if possible, the teacher can share the original version. ●
  - The teacher guides the activity towards reflection, focusing on differences between the versions and how structure can affect meaning.

## Conceptualization

- The teacher presents strategies for identifying the best structure when writing, using infographics, videos, or student examples. It is recommended to highlight the elements that will be mentioned. ●
  - Strategies should focus on identifying and using transitional words or phrases (contrast, cause and effect, chronology), introductory and concluding sentences, connectors, repetition of key terms, etc.

## Application

- Students review the text they ordered and ask Copilot to create an outline to restructure it as needed. The dictation feature can be used. ●
  - The following prompt can be used: *“Can you create a paragraph-by-paragraph summary of my text and identify any structural weaknesses?”*.
- Considering the AI’s suggestions, students review the order of paragraphs, the transitions between paragraphs, the main and secondary ideas, and rewrite their outlines. This can be done by hand or digitally. ●

## Color-coding to Identify the UDL Principles in Activities

Engagement	●	Provide multiple means of engagement.
Representation	●	Provide multiple means of representation.
Action and Expression	●	Provide multiple means of action and expression.

## *Activities to Reinforce the Editing Stage*

### **Activity 7:**

Polishing the writing with Grammarly

### **Objective of the Activity:**

Improve grammar, punctuation, and sentence structure in English.

### **Suggested Artificial Intelligence Tool:**

Grammarly

<https://www.grammarly.com/>



Free AI with paid subscription options, suitable as a grammar and style checker.

An account must be created even on the free plan. Therefore, access to an email address is needed.

The free option has enough features, although they are limited.


### **Curricular Objective:**

O.EFL 5.4 Deploy a range of learning strategies, thereby increasing disposition an ability to independently access further (language) learning and practice opportunities. Respect themselves and others within the communication process, cultivating habits of honesty and integrity into responsible academic behavior.


### **Assessment Criteria:**

CE.EFL.5.15. Plan and produce well-constructed informational texts by applying the writing process and while demonstrating an ability to justify one’s position on an argument through carefully selected information and appropriate language, tone and evidence.

### **Skills and Performance Descriptors to be Evaluated:**


EFL 5.4.7. Use the process of prewriting, drafting, revising, peer editing and proofreading (i.e., “the writing process”) to produce well-constructed informational texts. 

### **Indicators for the Performance Criteria:**


Learners can produce well-constructed informational texts by applying the writing process. Ref.I.EFL.5.15.1. (I.2, I.3, I.4, S.3, J.1) 

### **Methodology**

#### **Experience**

- Students write a 150–200-word text on a specific topic. The teacher can guide the topic to align with the content being reviewed. This can be done by hand or digitally. The dictation feature can be used. 
  - o Priority should be given to fluid, rapid writing, focusing on ideas over spelling or grammatical accuracy.

#### **Reflection**

- Students write their texts in Grammarly. The integrated AI will begin correcting grammatical aspects (subject-verb agreement, article usage, verb tenses), punctuation (commas, periods), clarity, and sentence structure (conciseness, convoluted phrasing, excessive use of the passive voice). 

- Students save or take a screenshot of the most relevant suggestions generated by Grammarly. ●
- In pairs or small groups, students reflect on and notice patterns in their writing. ●
  - The teacher can guide the activity with questions such as: “Which issues are flagged most?”, “Were any surprising?”, “Which suggestions do they agree/disagree with?”.

### Conceptualization

- The teacher promotes collaborative discussion spaces in which students identify common grammatical errors such as subject-verb agreement, incorrect verb tenses, or misuse of punctuation. ●
- The teacher presents examples to introduce grammatical rules based on the most significant suggestions generated by Grammarly. The teacher can use real examples from their students, making sure not to ridicule the work done. It is recommended to highlight the elements being corrected in the texts with Colors. ●

### Application

- Students review and edit their original writing, taking into account the suggestions generated by Grammarly and applying the content taught by the teacher. ●
  - Emphasis should be placed on improving the fluency and structure of the writing, optimizing the overall clarity of the ideas, correcting coherence between sentences, and perfecting spelling and grammar.
- Optionally, the teacher may ask students to write an additional paragraph reflecting what they have learnt from the AI’s suggestions; they should also justify the changes they made and explain how these changes improved their writing. ●
- Optionally, student work can be compiled into a digital or print anthology. ●

### Color-coding to Identify the UDL Principles in Activities

Engagement	●	Provide multiple means of engagement.
Representation	●	Provide multiple means of representation.
Action and Expression	●	Provide multiple means of action and expression.

### Activity 8:

Rewriting and paraphrasing in QuillBot

### Objective of the Activity:

Develop paraphrasing skills to express ideas in an original way.

### Suggested Artificial Intelligence Tool:

Grammarly

<https://www.grammarly.com/>

Free AI with paid subscription options, suitable as a grammar and style checker.



QuillBot

An account must be created even on the free plan. Therefore, access to an email address is needed.

The free option has enough features, although they are limited.


### Curricular Objective:

O.EFL 5.4 Deploy a range of learning strategies, thereby increasing disposition an ability to independently access further (language) learning and practice opportunities. Respect themselves and others within the communication process, cultivating habits of honesty and integrity into responsible academic behavior.


### Assessment Criteria:

CE.EFL.5.15. Plan and produce well-constructed informational texts by applying the writing process and while demonstrating an ability to justify one's position on an argument through carefully selected information and appropriate language, tone and evidence.

### Skills and Performance Descriptors to be Evaluated:




EFL 5.4.7. Use the process of prewriting, drafting, revising, peer editing and proofreading (i.e., "the writing process") to produce well-constructed informational texts. 

### Indicators for the Performance Criteria:


Learners can produce well-constructed informational texts by applying the writing process. Ref.I.EFL.5.15.1. (I.2, I.3, I.4, S.3, J.1) 

### Methodology

#### Experience

- The teacher provides a short paragraph from an academic or informational text. The teacher can adjust the length and topic of the text to align it with the content being reviewed in class. 
- Students enter the paragraph into QuillBot and use the paraphrasing function. The dictation feature can be used. 
- Once the paraphrased paragraph is obtained, students highlight in Color the words, phrases, or structures that QuillBot changed. 
  - o The activity should focus on identifying sentence reordering, merging, or splitting.

#### Reflexión

- Students compare the original paragraph with the one generated by AI to assess the extent to which the paraphrase retains the original meaning and clarity. 

- The Activity should focus on identifying changes that improved clarity or meaning, as well as distortions, substitutions, or imprecise changes. The teacher can guide the activity with the question: “Does the AI version retain the core message?”, “Is anything lost or misrepresented?”, “Did QuillBot improve or weaken the clarity of the paragraph?”, “Did it change the intended meaning or emphasis?”.
- Students discuss the content evaluation in pairs or groups. ●

### Conceptualization

- The teacher explains different paraphrasing strategies with real examples, infographics, videos, etc. ●
  - Some paraphrasing techniques could include: *synonym substitution*, *sentence restructuring* (e.g., *changing clause order or combining/splitting ideas*), *voice transformation* (active ↔ passive), *changing grammatical forms* (e.g., *noun to verb*).
- The teacher also explains some common paraphrasing errors with real examples, infographics, videos, etc. ●
  - The discussion should focus on: *minimal changes* (risk of plagiarism), *changing too much* (alteration of meaning), *substitution with words that are inaccurate or too generic*.

### Application

- The teacher provides a new paragraph, or students can choose one from a textbook, an online article, etc., to apply the paraphrasing strategies they have reviewed. ●
- Students paraphrase the paragraph and enter it into QuillBot. ●
- Students compare their version with the AI-generated version. ●
  - The teacher guides the activity so that students reflect on whether the AI-generated suggestions are useful or not.
- Once the two versions have been compared, students produce a new, improved version. ●
- The teacher may ask students to write a short reflection on the activity by hand or digitally. The dictation function can be used. ●
  - Students can be guided with the questions: “What did I learn about paraphrasing?”, “Which technique was most useful?”, “How did QuillBot help or confuse me?”.

### Color-coding to Identify the UDL Principles in Activities

Engagement	●	Provide multiple means of engagement.
Representation	●	Provide multiple means of representation.
Action and Expression	●	Provide multiple means of action and expression.

## *Activities to Reinforce the Publication Stage*

### **Activity 9:**

Controlling the tone with Gemini

### **Objective of the Activity:**

Adapt the tone of writing to different audiences and purposes.

### **Suggested Artificial Intelligence Tool:**

Google Gemini

<https://gemini.google.com/>



Free AI suitable for use as a chatbot and virtual assistant.

No account is needed to access its basic features.

### **Curricular Objective:**

O.EFL 5.4 Deploy a range of learning strategies, thereby increasing disposition an ability to independently access further (language) learning and practice opportunities. Respect themselves and others within the communication process, cultivating habits of honesty and integrity into responsible academic behavior.

### **Assessment Criteria:**

CE.EFL.5.15. Plan and produce well-constructed informational texts by applying the writing process and while demonstrating an ability to justify one’s position on an argument through carefully selected information and appropriate language, tone and evidence.

### **Skills and Performance Descriptors to be Evaluated:**

EFL 5.4.7. Use the process of prewriting, drafting, revising, peer editing and proofreading (i.e., “the writing process”) to produce well-constructed informational texts. 🗨️

### **Indicators for the Performance Criteria:**

Learners can produce well-constructed informational texts by applying the writing process. Ref.I.EFL.5.15.1. (I.2, I.3, I.4, S.3, J.1) 🗨️

### **Methodology**

#### **Experience**

- Students write a short message on paper or digitally. The dictation feature can be used. The message can be about any topic, or the teacher can align it with the required content. The length should be short, between 3–5 sentences, although it can be increased depending on the students’ level. 🗨️
  - The message can be about: “asking a teacher for a deadline extension”, “requesting help from a friend”, “emailing a classmate for a favor”, or “invite a friend to a movie or dinner”.
- Students enter the message into Gemini. The dictation feature can be used.
  - To begin the tone analysis of the message written by the student, the following prompt can be used: “Analyze the tone of the following message. What tone does it use (formal, informal, neutral)? What features of the writing create that tone?”.

## Reflection

- Students analyze their messages and the responses generated by Gemini, highlighting or underlining in Color the key indicators for identifying the tone of the message. ●
  - The analysis should focus, for example, on greetings, politeness markers, contractions, emojis, and punctuation.
- Students compare their own messages with Gemini’s responses and reflect on the similarities and differences. ●
  - The teacher can guide the activity with the following questions: “*Do you agree with Gemini’s tone identification?*”, “*Which words or punctuation marks created the tone?*”, “*Was the tone appropriate for your intended audience?*”.

## Conceptualization

- The teacher presents some markers of formal tone (complete sentences, modal verbs, no contractions, polite closings; neutral (clear structure, standard phrasing, polite but not excessively formal); and informal (contractions, emojis, informal greetings, slang, exclamations). It can be done using graphic organizers, infographics, practical examples, videos, etc. ●
- The teacher presents the example: “*Can you help me with this?*” and asks students for different ways to change the tone of the message. ●

## Application

- Students rewrite their message in two different tones. The dictation feature can be used. ●
- In pairs or groups, students exchange the rewritten messages and guess the tone in which they were written. ●
  - The discussion should focus on recognizing and naming tone markers.
- Optionally, students can write a short reflection on their use of the AI tool, either by hand or digitally, using the following questions: “*Which tone was hardest to write?*”, “*What language features helped the most?*”, “*How did Gemini help you revise effectively?*”. ●

## Color-coding to Identify the UDL Principles in Activities

Engagement	●	Provide multiple means of engagement.
Representation	●	Provide multiple means of representation.
Action and Expression	●	Provide multiple means of action and expression.

### Activity 10:

Debating and arguing with ChatGPT

### Objective of the Activity:

Develop persuasive writing skills by engaging with opposing viewpoints.

### Suggested Artificial Intelligence Tool:

ChatGPT

<https://chatgpt.com/>



Free AI with paid subscription options, suitable as a chatbot and virtual assistant.

An account is not needed to access its basic features. However, it is recommended to access the free plan by creating an account, so it is important to have access to an email address.

The free option has enough features, although they are limited.

### Curricular Objective:

O.EFL 5.4 Deploy a range of learning strategies, thereby increasing disposition an ability to independently access further (language) learning and practice opportunities. Respect themselves and others within the communication process, cultivating habits of honesty and integrity into responsible academic behavior.

### Assessment Criteria:

CE.EFL.5.15. Plan and produce well-constructed informational texts by applying the writing process and while demonstrating an ability to justify one’s position on an argument through carefully selected information and appropriate language, tone and evidence.

### Skills and Performance Descriptors to be Evaluated:

EFL 5.4.7. Use the process of prewriting, drafting, revising, peer editing and proofreading (i.e., “the writing process”) to produce well-constructed informational texts. 🗨️

### Indicators for the Performance Criteria:

Learners can produce well-constructed informational texts by applying the writing process. Ref.I.EFL.5.15.1. (I.2, I.3, I.4, S.3, J.1) 🗨️

### Methodology

#### Experience

- Students choose a controversial topic based on their level and interests; the intention is for them to identify different points of view before forming their own opinion🗨️.
  - Some topics could include: “*Should school uniforms be compulsory?*”, “*Should students have homework?*”
- Students ask ChatGPT to take on both the pro and con positions to provide different perspectives. There should be at least two of each. The dictation feature can be used. 🗨️
  - The following prompt can be used: “*Give me arguments for and against this idea...*”

- Students formulate one or two follow-up questions to deepen their understanding of the ideas generated by ChatGPT. The dictation feature can be used. ●
  - The following prompt can be used: “*Can you give examples?*”
- Students take notes on the arguments and organize them in a T-chart. This can be done by hand or digitally. ●
  - The activity should focus on identifying the main arguments, evidence, tone, or bias.

### Reflection

- The teacher creates discussion spaces by asking questions such as: “*Which side do you feel more convinced by?*”, “*Did anything from the AI surprise you or challenge your thinking?*”. ●
- Students write a short, one- or two-sentence reflection on which position convinced them the most, indicating the arguments that led them to that decision. Once they’re done, students share their reflections in pairs or in groups. ●

### Conceptualization

- The teacher explains the structure of persuasive writing: thesis, evidence, counterarguments, and rebuttals, using infographics or examples in which the elements are clearly labelled. ●
- The teacher prepares a template for planning essays. ●

### Application

- Students write an argumentative essay of no more than 120 words, including their own ideas and information generated by ChatGPT. It is imperative for the teacher to monitor the activity so that students do not rely solely on AI-generated arguments. It can be written by hand or digitally. The dictation feature can be used. ●
  - When writing the essay, students should strive to include transitions for greater clarity.
- In pairs or groups, students share their writing and evaluate its content using a simple checklist. ●
  - The list may include the following: “*Clear thesis?*”, “*Logical structure?*”, “*AI argument integrated smoothly?*”, “*Counterargument addressed?*”

### Color-coding to Identify the UDL Principles in Activities

Engagement	●	Provide multiple means of engagement.
Representation	●	Provide multiple means of representation.
Action and Expression	●	Provide multiple means of action and expression.

## Activities to Reinforce the Content Dimension

### Activity 11:

ChatGPT-assisted idea development

### Objective of the Activity:

Expand and deepen the content ideas for a given writing prompt.

### Suggested Artificial Intelligence Tool:

ChatGPT

<https://chatgpt.com/>



Free AI with paid subscription options, suitable as a chatbot and virtual assistant.

An account is not needed to access its basic features. However, it is recommended to access the free plan by creating an account, so it is important to have access to an email address.

The free option has enough features, although they are limited.



### Curricular Objective:

O.EFL 5.4 Deploy a range of learning strategies, thereby increasing disposition an ability to independently access further (language) learning and practice opportunities. Respect themselves and others within the communication process, cultivating habits of honesty and integrity into responsible academic behavior.



### Assessment Criteria:

CE.EFL.5.13. Produce emails, blog posts and other written texts using an effective voice and a variety of appropriate writing styles and conventions.

### Skills and Performance Descriptors to be Evaluated:



EFL 5.4.9. Use a variety of oral, print and electronic forms for writing to others or for writing for self, applying the conventions of social writing. (Example: notes, invitations, emails, blog entries and comments, notes to self, etc.)  

### Indicators for the Performance Criteria:

Learners can produce emails, blog posts and other written texts. Ref. I.EFL.5.13.1 (I.3, S.3, J.2)  

### Methodology

#### Experience

- Students write a basic idea on any topic. The teacher can guide the activity to align it with the content being reviewed. This can be done by hand or digitally. The dictation feature can be used. 
  - o Example idea: "Social media impacts self-esteem in teenagers".
- Students use ChatGPT to expand on the written idea. 
  - o Students can use the following prompts: "Give examples that support this idea.", "Explain this from a psychological/sociological perspective.", "What are some counterarguments?", etc.
- Students compare the different ideas generated by AI and note the most useful ones. Notes can be written by hand or digitally. The dictation feature can be used.

## Reflection

- Students reflect on and analyze the voice, tone, and style of content generated by ChatGPT. ●
  - The teacher can guide the activity with the questions: “*Is it formal/informal? Neutral/biased?*”, “*How does vocabulary suggest emotion or intention?*”
  - Additionally, students should note the ideas that are most interesting, original, unexpected, or surprising. It is also recommended to identify information that is vague, inaccurate, or irrelevant.
- In pairs or groups, students discuss the question: “*What might a human writer do differently?*”. ●

## Conceptualización

- The teacher explains how to evaluate ideas that can support a concept in terms of relevance, accuracy, logic, and depth. Additionally, it should be indicated how primary and secondary sources of information can be distinguished. This can be done through infographics, practical examples, videos, etc. ●

## Application

- Students review and rewrite their original ideas to form paragraphs. For this, they will use their notes on the most appropriate information generated by ChatGPT. ●
- Optionally, students can work in groups or pairs to evaluate their work using a checklist. ●
  - The list should include aspects such as voice, evidence, clarity, tone, relevance, etc.

## Color-coding to Identify the UDL Principles in Activities

Engagement	●	Provide multiple means of engagement.
Representation	●	Provide multiple means of representation.
Action and Expression	●	Provide multiple means of action and expression.

## Activity 12:

Checking relevance with ChatGPT

### Objective of the Activity:

Evaluate and improve the relevance of content in writing.

### Suggested Artificial Intelligence Tool:

ChatGPT

<https://chatgpt.com/>



Free AI with paid subscription options, suitable as a chatbot and virtual assistant.

An account is not needed to access its basic features. However, it is recommended to access the free plan by creating an account, so it is important to have access to an email address.

The free option has enough features, although they are limited.



### Curricular Objective:

O.EFL 5.4 Deploy a range of learning strategies, thereby increasing disposition an ability to independently access further (language) learning and practice opportunities. Respect themselves and others within the communication process, cultivating habits of honesty and integrity into responsible academic behavior.



### Assessment Criteria:

CE.EFL.5.13. Produce emails, blog posts and other written texts using an effective voice and a variety of appropriate writing styles and conventions.

### Skills and Performance Descriptors to be Evaluated:



EFL 5.4.9. Use a variety of oral, print and electronic forms for writing to others or for writing for self, applying the conventions of social writing. (Example: notes, invitations, emails, blog entries and comments, notes to self, etc.)  

### Indicators for the Performance Criteria:

Learners can produce emails, blog posts and other written texts. Ref. I.EFL.5.13.1 (I.3, S.3, J.2)  

### Methodology

#### Experience

- Students submit drafts written in ChatGPT to identify sections that are irrelevant or off-topic. The teacher can guide the topic so that it aligns with the content being reviewed. 
  - o The following prompts can be used: *“Review this text and highlight any sentences or paragraphs that seem off-topic or unrelated to my thesis.”*, *“Which parts of this draft do not clearly support my main argument or purpose?”*, *“Point out any tangents, redundant sections, or unclear transitions in my writing.”*
- Once the AI-generated responses are produced, students rewrite their drafts, taking into account the feedback obtained from ChatGPT. It is suggested to use Colors to highlight or underline the marked sections. This activity can be done by hand or digitally. The dictation feature can be used if it is done on a computer. 

## Reflection

- In pairs or groups, students argue about the suggestions generated by ChatGPT and debate whether they align with the message they intend to convey. ●
  - The teacher can guide the activity using the following questions: “Do you agree with the AI’s feedback? Why or why not?”, “Did ChatGPT misunderstand any part of your message?”, “Which comments helped you rethink your writing the most?”.
- Optionally, students can write a short reflection by hand or digitally about the changes they made to their writing, completing this sentence: “One section I now realize was off-topic is... I’m changing it by...”. This can be done individually or collaboratively. ●

## Conceptualization

- The teacher shares some strategies for staying focused on an idea while writing, using infographics, videos, or real-life examples. ●
  - Some topics that can be addressed include: “Defining a clear thesis or controlling idea”, “how each paragraph should relate to the central purpose”, “using topic sentences and transitions to guide the reader”, “identifying common causes of drifting off-topic (e.g., interesting but unrelated facts, anecdotes that lack connection, repetition)”.

## Application

- Students revise their drafts by cutting, rewriting, or reorganizing content to improve relevance and cohesion. This can be done by hand or digitally. The dictation feature can also be used. ●
- As a form of self-assessment, students can evaluate their writing using a checklist. Students can also work in pairs to carry out a peer evaluation. It is suggested to use a simple checklist. ●
  - The checklist may include the following evaluation indicators: “Does each paragraph support the main argument or story?”, “Are any points repetitive or distracting?”, “Does every detail help build toward your conclusion?”.

## Color-coding to Identify the UDL Principles in Activities

Engagement	●	Provide multiple means of engagement.
Representation	●	Provide multiple means of representation.
Action and Expression	●	Provide multiple means of action and expression.

## *Activities to Reinforce the Communicative Achievement Dimension*

### **Activity 13:**

Writing dialogues in Character.AI

### **Objective of the Activity:**

Practice writing natural and engaging conversations in English.

### **Suggested Artificial Intelligence Tool:**

Character.AI

<https://character.ai/>



A free-to-use AI with paid subscription options, suitable as a chatbot for interacting with fictional or user-created characters.

It requires constant supervision and monitoring to prevent its misuse.

No account is needed to access its basic features. However, it is recommended to access the free plan by creating an account.

Therefore, it is important to have access to an email address.

The free option has enough features, although they are limited.



### **Curricular Objective:**

O.EFL 5.4 Deploy a range of learning strategies, thereby increasing disposition an ability to independently access further (language) learning and practice opportunities. Respect themselves and others within the communication process, cultivating habits of honesty and integrity into responsible academic behavior.



### **Assessment Criteria:**

CE.EFL.5.13. Produce emails, blog posts and other written texts using an effective voice and a variety of appropriate writing styles and conventions.

### **Skills and Performance Descriptors to be Evaluated:**

EFL 5.4.9. Use a variety of oral, print and electronic forms for writing to others or for writing for self, applying the conventions of social writing. (Example: notes, invitations, emails, blog entries and comments, notes to self, etc.)  

### **Indicators for the Performance Criteria:**

Learners can produce emails, blog posts and other written texts. Ref. I.EFL.5.13.1 (I.3, S.3, J.2)  

### **Methodology**

#### **Experience**

- The teacher assigns or allows students to choose a character on Character.AI.
  - It is recommended that students interact with a pre-existing character, such as a historical figure, a superhero, or a professional (Sherlock Holmes, a magician, a customer service agent, etc.).
  - Students can also be allowed to create their own characters. To this end, the teacher should guide the creation of an appropriate prompt that aligns with the content and the needs of the class. However, supervision is required to prevent students from using AI inappropriately.

- Students interact with the Character.AI-generated character by starting a conversation, asking questions, or describing situations. ●
  - The teacher can assist their students by providing example messages: *“I need your help solving a mystery/problem—how would you respond?”*, *“Describe your world or your role in it—what makes you unique?”*, *“What do you think of [insert event or conflict]?”*
  - The teacher guides the activity by instructing students to pay attention to the vocabulary and tone the character uses to respond in the conversation.

### Reflection

- Students analyze their interaction with the AI and reflect on the character’s tone, vocabulary, and gestures. Additionally, they identify how emotions and personality are conveyed in the text. ●
  - The reflection should focus on the following aspects: tone (serious, sarcastic, friendly, mysterious, etc.), vocabulary (formal, informal, academic, etc.).
- In pairs or groups, students discuss their interaction with the AI-generated character. The teacher can guide the activity with the following questions: *“How did the AI’s word choices and phrasing show its personality?”*, *“What made this character believable or entertaining?”*. ●

### Conceptualization

- The teacher explains how to make a written conversation sound natural, engaging, and authentic through infographics, videos, or practical examples. ●
  - Some topics that can be addressed include: *Use of contractions, informal phrases, hesitation, or interruption (e.g., “Well... I mean, sort of.”)*, *how different characters speak differently: slang, tone, sentence length, etc.*, *Characters not always answering directly (realistic unpredictability)*.

### Application

- In groups or pairs, students assume the roles of established characters and engage in a written conversation. ●
  - The conversation should reflect each character’s unique voice and tone, clear emotional shifts or conflicts, and correct dialogue formatting and punctuation.
- Optionally, students can read the conversation aloud. ●

### Color-coding to Identify the UDL Principles in Activities

Engagement	●	Provide multiple means of engagement.
Representation	●	Provide multiple means of representation.
Action and Expression	●	Provide multiple means of action and expression.

## Activity 14:

Evaluating Purpose with ChatGPT

### Objective of the Activity:

Ensure that the writing fulfils its intended communicative purpose.

### Suggested Artificial Intelligence Tool:

ChatGPT

<https://chatgpt.com/>



Free AI with paid subscription options, suitable as a chatbot and virtual assistant.

An account is not needed to access its basic features. However, it is recommended to access the free plan by creating an account, so it is important to have access to an email address.

The free option has enough features, although they are limited.



### Curricular Objective:

O.EFL 5.4 Deploy a range of learning strategies, thereby increasing disposition an ability to independently access further (language) learning and practice opportunities. Respect themselves and others within the communication process, cultivating habits of honesty and integrity into responsible academic behavior.



### Assessment Criteria:

CE.EFL.5.13. Produce emails, blog posts and other written texts using an effective voice and a variety of appropriate writing styles and conventions.

### Skills and Performance Descriptors to be Evaluated:


EFL 5.4.9. Use a variety of oral, print and electronic forms for writing to others or for writing for self, applying the conventions of social writing. (Example: notes, invitations, emails, blog entries and comments, notes to self, etc.)  

### Indicators for the Performance Criteria:


Learners can produce emails, blog posts and other written texts. Ref. I.EFL.5.13.1 (I.3, S.3, J.2)  

### Methodology

#### Experience

- Students enter a previously written draft into ChatGPT and request summaries to verify whether the text conveys what they actually want to communicate. The dictation feature can be used. 
  - o To obtain summaries, the following prompts can be used: “*Summarize the main message or argument of this text.*”, “*What do you think I’m trying to say in this piece?*”, “*What is the central purpose or takeaway of this writing?*”, “*Is the main point of this draft clear?*”, “*What might a reader misunderstand in this text?*”

#### Reflection

- Students analyze the AI-generated summaries by asking themselves the following questions: “*Does the summary reflect what I meant to say?*”, “*What parts of my writing led to misunderstandings or vague takeaways?*”, “*Were there any ideas I meant to emphasize that the AI missed?*”. 

- In pairs or groups, students share the AI-generated summaries and compare them with the original draft. ●
- Optionally, students can write a short journal entry by completing the following sentence: “*One way the AI misunderstood my message was... I think this happened because...*”. This can be done by hand or digitally. ●

### Conceptualization

- The teacher explains the role of purpose in writing through infographics or practical examples. ●
  - Some topics that can be addressed include: *How purpose influences tone, vocabulary, structure, level of detail; strategies to reinforce purpose: clear thesis or controlling idea, focused supporting details, strong topic and concluding sentences; common causes of miscommunication: mixed signals, off-topic sections, overly vague wording*

### Application

- Students review unclear sections of their writing to refine the communicative objective and improve clarity.
  - The activity should focus on refining the thesis/objective, eliminating ambiguity, clarifying transitions or logic, and adapting the tone and language to the audience and purpose.
- As a form of self-assessment, students can evaluate their writing using a checklist. Students can also work in pairs to carry out a peer evaluation. It is suggested to use a simple checklist.
  - The checklist may include the following evaluation indicators: “*Is the main message obvious within the first paragraph?*”, “*Does every paragraph support the same central purpose?*”, “*Could a reader unfamiliar with the topic understand my point?*”.

### Color-coding to Identify the UDL Principles in Activities

Engagement	●	Provide multiple means of engagement.
Representation	●	Provide multiple means of representation.
Action and Expression	●	Provide multiple means of action and expression.

## *Activities to Reinforce the Organization Dimension*

### **Activity 15:**

Mapping essays generated by ChatGPT

### **Objective of the Activity:**

Create a detailed essay outline to structure writing logically.

### **Suggested Artificial Intelligence Tool:**

ChatGPT

<https://chatgpt.com/>



Free AI with paid subscription options, suitable as a chatbot and virtual assistant.

No account is needed to access its basic features. However, it is recommended to access the free plan by creating an account. Therefore, it is important to have access to an email address.

The free option has enough features, although they are limited.



### **Curricular Objective:**

O.EFL 5.4 Deploy a range of learning strategies, thereby increasing disposition an ability to independently access further (language) learning and practice opportunities. Respect themselves and others within the communication process, cultivating habits of honesty and integrity into responsible academic behavior.



### **Assessment Criteria:**

CE.EFL.5.13. Produce emails, blog posts and other written texts using an effective voice and a variety of appropriate writing styles and conventions.

### **Skills and Performance Descriptors to be Evaluated:**



EFL 5.4.9. Use a variety of oral, print and electronic forms for writing to others or for writing for self, applying the conventions of social writing. (Example: notes, invitations, emails, blog entries and comments, notes to self, etc.)  

### **Indicators for the Performance Criteria:**

Learners can produce emails, blog posts and other written texts. Ref. I.EFL.5.13.1 (I.3, S.3, J.2)  

### **Methodology**

#### **Experience**

- Students enter essay topics and main ideas into ChatGPT. Then they request a detailed outline. The teacher can guide the choice of topics to align with the content being covered in class. 
- o Students can use the following prompts to generate detailed outlines:
  - “Here’s my essay topic and main idea. Can you generate a detailed outline?”
  - “Give me a structured outline for an essay on [topic], with an introduction, body, and conclusion.”
  - “Suggest an outline using strong transitions and logical flow for an essay on [my topic].”
  - “What’s a good way to organize these points: [list of main points]?”
  - “Which structure would make this argument most persuasive?”
- Students save the generated outlines. This can be done by hand or on a computer. The dictation feature can be used. 

## Reflection

- Students analyze the outlines suggested by ChatGPT, identifying strong transitions and potential weaknesses. ●
- In pairs or groups, students discuss the AI-generated outlines. ●
  - The teacher can guide reflection with the following questions: “Which part of the outline felt strongest or most logical?”, “Where does the structure lose focus or become repetitive?”, “Does this structure suit the purpose and audience of my essay?”

## Conceptualization

- The teacher explains the most common structures for organizing an essay, emphasizing that the order of the paragraphs affects the clarity of the writing. This should be done through infographics, diagrams, practical examples, or paragraph-ordering games. ●

## Application

- Students create their own essay outlines, considering the most appropriate elements from ChatGPT and the ideas provided by the teacher. ●
  - Students should explain why they chose the structure, how their decision would improve the clarity of the arguments, and what differences exist between their work and that generated by AI. This can be done in writing or orally.
- As a form of self-assessment, students can evaluate their writing using a checklist. Students can also work in pairs to carry out a peer evaluation. It is suggested to use a simple checklist. ●
  - The checklist may include the following evaluation indicators: “Is the structure logical and easy to follow?”, “Are transitions strong and varied?”, “Does each section build toward the essay’s goal?”

## Color-coding to Identify the UDL Principles in Activities

Engagement	●	Provide multiple means of engagement.
Representation	●	Provide multiple means of representation.
Action and Expression	●	Provide multiple means of action and expression.

## Activity 16:

Cohesion Analysis in Gemini

### Objective of the Activity:

Improve coherence and flow between paragraphs.

### Suggested Artificial Intelligence Tool:

Google Gemini

<https://gemini.google.com/>



Free AI suitable for use as a chatbot and virtual assistant.

No account is needed to access its basic features.



### Curricular Objective:

O.EFL 5.4 Deploy a range of learning strategies, thereby increasing disposition an ability to independently access further (language) learning and practice opportunities. Respect themselves and others within the communication process, cultivating habits of honesty and integrity into responsible academic behavior.



### Assessment Criteria:

CE.EFL.5.13. Produce emails, blog posts and other written texts using an effective voice and a variety of appropriate writing styles and conventions.

### Skills and Performance Descriptors to be Evaluated:


EFL 5.4.9. Use a variety of oral, print and electronic forms for writing to others or for writing for self, applying the conventions of social writing. (Example: notes, invitations, emails, blog entries and comments, notes to self, etc.)  

### Indicators for the Performance Criteria:


Learners can produce emails, blog posts and other written texts. Ref. I.EFL.5.13.1 (I.3, S.3, J.2)  

### Methodology

#### Experience

- Students enter individual paragraphs on the same topic into Gemini to receive feedback on the use of connectors and more appropriate transitions to achieve a coherent and cohesive text. The dictation feature can be used. 
  - Students can use the following prompts: “*Evaluate the transitions and connectors in this paragraph. Suggest improvements.*”, “*Are the ideas in this paragraph well-connected? Highlight any missing or weak links.*”, “*Suggest better or more varied transition words to improve flow.*”

#### Reflection

- Students review the information generated by AI, and the teacher creates opportunities to discuss the role of connectors in reader comprehension. 
  - The teacher can guide the activity with these questions: “*Which transitions helped clarify the paragraph’s logic?*”, “*Which suggestions didn’t fit my intended meaning?*”, “*Where was the paragraph hard to follow before the AI’s feedback?*”, “*How do transitions help a reader stay oriented within a paragraph?*”.

## Conceptualization

- The teacher presents cohesion resources and paragraph transition strategies through infographics, diagrams, or practical examples. ●
  - Some topics that can be covered include: *addition (furthermore, in addition, also)*, *contrast (however, on the other hand, yet)*, *cause (therefore, because, as a result)*, *Sequence (first, next, finally)*. It is also possible to revise: *transition placement: at the beginning of a sentence, within a sentence, or between paragraphs*. Some strategies may include: *using synonyms, referencing words (e.g., this, such, these ideas), parallel structures*.

## Application

- Students rewrite the paragraphs, applying connectors and improving the sequencing based on the feedback received. This can be done by hand or digitally. The dictation feature can be used. ●
- As a form of self-assessment, students can grade their writing using a simple rubric. Students can also work in pairs to conduct a peer evaluation. ●
  - The evaluation rubric could include the following dimensions: ***use of transitions*** (*clear; varied, and effectively placed; mostly appropriate with some variation; limited or repetitive; few or missing transitions*), ***logical flow*** (*ideas flow smoothly with clear progression; generally clear structure; some jumps or unclear shifts; disjointed or confusing*); ***revision quality*** (*major improvements based on feedback; some meaningful changes; minimal revision effort; few or no changes made*); ***conventions*** (*proper grammar, punctuation, and spelling; minor errors; several noticeable errors; frequent errors hinder clarity*)
- Optionally, students may write a short reflection by hand or digitally, answering the following question: “*What feedback did I find most useful? How did I change my paragraph to make it clearer or more cohesive?*” ●

## Color-coding to Identify the UDL Principles in Activities

Engagement	●	Provide multiple means of engagement.
Representation	●	Provide multiple means of representation.
Action and Expression	●	Provide multiple means of action and expression.

## Activities to Reinforce the Language Dimension

### Activity 17:

Syntactic refinement with Grammarly

#### Objective of the Activity:

Correct grammatical errors and improve sentence structure.

#### Suggested Artificial Intelligence Tool:

Grammarly

<https://www.grammarly.com/>



Free AI with paid subscription options, suitable as a grammar and style checker.

An account must be created even on the free plan. Therefore, access to an email address is needed.

The free option has enough features, although they are limited.


#### Curricular Objective:

O.EFL 5.4 Deploy a range of learning strategies, thereby increasing disposition an ability to independently access further (language) learning and practice opportunities. Respect themselves and others within the communication process, cultivating habits of honesty and integrity into responsible academic behavior.


#### Assessment Criteria:

CE.EFL.5.13. Produce emails, blog posts and other written texts using an effective voice and a variety of appropriate writing styles and conventions.

#### Skills and Performance Descriptors to be Evaluated:




EFL 5.4.9. Use a variety of oral, print and electronic forms for writing to others or for writing for self, applying the conventions of social writing. (Example: notes, invitations, emails, blog entries and comments, notes to self, etc.) 

#### Indicators for the Performance Criteria:


Learners can produce emails, blog posts and other written texts. Ref. I.EFL.5.13.1 (I.3, S.3, J.2) 

#### Methodology

##### Experience

- Students upload a draft of a paragraph, essay, journal entry, etc., to Grammarly. The dictation feature can be used. 
- Students review the AI-generated suggestions and identify common issues: “*subject-verb agreement*”, “*comma splices*”, “*passive voice*”, “*unclear pronouns*”, “*tone mismatches*”. 
- Students create their own error log in which they document the 5–10 most frequent errors that Grammarly flags in their writing. 
  - Optionally, students may underline or highlight errors in their writing using Colors.

##### Reflection

- In pairs or groups, students classify the errors into categories. This can be done by hand or digitally. 

- Some categories may include: “*Sentence structure (fragments, run-ons)*”, “*Punctuation (commas, semicolons)*”, “*Agreement (subject-verb, pronoun-antecedent)*”, “*Style (wordiness, tone, clarity)*”.
- In pairs or groups, students discuss and reflect on the errors they have identified and classified. ●
- The teacher can guide the activity with the following questions: “*Why do I keep making this mistake?*”, “*Do I struggle more when I write quickly, informally, or in longer sentences?*”
- Optionally, the teacher may choose different students to share a corrected phrase or sentence from their writing and explain what changes they made and why. ●

### Conceptualization

- The teacher reviews key grammar rules and sentence types using infographics, videos, etc. ●
- Some topics that can be covered in this phase are: *simple, compound, complex, compound-complex sentences*. Additionally, *how to fix common errors: Run-ons → Break or link correctly, fragments → add subject/predicate or combine, comma splices → Use conjunctions or semicolons*.
- Optionally, the teacher can use AI to generate sentences with intentional errors for students to identify and correct. ●

### Application

- Students review 3–5 sentences from their original drafts that contain errors and rewrite them using appropriate grammar and structures for their level. This can be done by hand or digitally. The dictation feature can be used. ●
- Students point out the corrections made and explain how those changes improved the clarity of the message. This can be done in pairs, in groups, or in front of the whole class. ●
- Optionally, the teacher can conduct an “Exit Ticket” activity by asking the question: “*What sentence structure did I improve the most and why does it matter?*” ●

### Color-coding to Identify the UDL Principles in Activities

Engagement	●	Provide multiple means of engagement.
Representation	●	Provide multiple means of representation.
Action and Expression	●	Provide multiple means of action and expression.

### Activity 18:

Improving vocabulary with QuillBot

#### Objective of the Activity:

Use a varied and precise vocabulary to improve writing.

#### Suggested Artificial Intelligence Tool:

Grammarly

<https://www.grammarly.com/>



QuillBot

Free AI with paid subscription options, suitable as a grammar and style checker.

An account must be created even on the free plan. Therefore, access to an email address is needed.

The free option has enough features, although they are limited.


#### Curricular Objective:

O.EFL 5.4 Deploy a range of learning strategies, thereby increasing disposition an ability to independently access further (language) learning and practice opportunities. Respect themselves and others within the communication process, cultivating habits of honesty and integrity into responsible academic behavior.


#### Assessment Criteria:

CE.EFL.5.13. Produce emails, blog posts and other written texts using an effective voice and a variety of appropriate writing styles and conventions.

#### Skills and Performance Descriptors to be Evaluated:




EFL 5.4.9. Use a variety of oral, print and electronic forms for writing to others or for writing for self, applying the conventions of social writing. (Example: notes, invitations, emails, blog entries and comments, notes to self, etc.) 

#### Indicators for the Performance Criteria:

Learners can produce emails, blog posts and other written texts. Ref. I.EFL.5.13.1 (I.3, S.3, J.2) 

#### Methodology

##### Experience

- Using a previously written draft, students review, identify, and underline words that are overused or vague. The paragraph could have been written by hand or digitally. 
  - o Examples of words used too frequently: “good”, “bad”, “very”, etc.
  - o Examples of vague or abstract words: “things”, “stuff”, “important”, etc.
- Students enter their writing into the QuillBot tool and explore different alternatives to avoid word repetition, such as synonyms and idiomatic expressions. The dictation feature can be used. 
- Students list the AI-suggested substitutions and rank them according to how well they fit into the sentences, ensuring that the meaning and message remain unchanged. This list can be created by hand or digitally. This list can be made by hand or digitally. 

## Reflection

- From the list created, students choose 3–5 substitutions; this decision must be justified by answering the following questions: “Does this word change the meaning or tone?”, “Is it more formal, casual, or technical than my original word?”, “Would a reader find this clearer or more confusing?”. ●
- In pairs or groups, students explain the substitution decisions they made to receive feedback from others. ●
  - The teacher can guide the group discussion with the question: “When is a simpler word actually the better choice?”

## Conceptualización

- The teacher explains different nuances of vocabulary, register, and meanings through infographics, videos, practical examples, etc. ●
  - Some topics that could be covered include: “Difference between denotation and connotation”, “formality/register: “child” vs. “kid” vs. “offspring”, “Idiomatic vs. literal language”, “Subtle tone shifts caused by synonym choice”, “Overcorrecting: why “bigger words” aren’t always better”.
- Optionally, the teacher can use AI to generate a list of different words or phrases for students to classify in terms of tone (*neutral, emotional, sarcastic, academic*). ●

## Application

- Students review their drafts and replace 5–10 vague words or phrases with more precise vocabulary. This can be done by hand or digitally. ●
- As students make the necessary substitutions, they write a short explanation of why the new word improves the paragraph’s content (clarity, tone, or flow). ●
- Optionally, students can write a short reflection. The teacher can guide the activity by asking the following question: “What did I learn about how words shape tone and meaning?”. This can be done by hand on a piece of paper or digitally. ●
- Optionally, the teacher can conduct an “Exit Ticket” activity using the phrase: “One word I changed and why”. ●

### Color-coding to Identify the UDL Principles in Activities

Engagement	●	Provide multiple means of engagement.
Representation	●	Provide multiple means of representation.
Action and Expression	●	Provide multiple means of action and expression.

## CHAPTER VI

### CONCLUSIONS AND RECOMMENDATIONS

#### 6.1. Conclusions

In the following section, the aim is to clearly and precisely summarize the contributions of this research, linking its findings to the specific objectives established at the outset of the study, which in turn contribute to the achievement of the overall objective by offering a practical proposal for its implementation. Therefore, after integrating the quantitative and qualitative data, the following conclusions have been reached:

First, the English writing skills of secondary school students were assessed, which allowed for the identification of areas requiring improvement under two approaches: writing as a process and writing as a product. Once the results were analyzed, it was concluded that students mainly had shortcomings in the preliminary draft, draft and revision stages, the implications of which were evident in the quality of their writing. With regard to the editing and publication stages, the students achieved an acceptable level, as although their performance could be better, they met the minimum requirements. On the other hand, when it comes to the written product, students face significant difficulties in the area of organization. In addition, in terms of content, communicative achievement and language, students meet the minimum requirements. Thus, it is clear that students need to develop strategies for generating and organizing ideas in order to improve the cohesion and coherence of their writing.

At the same time, the digital skills of English teachers were described in order to identify their ability to integrate AI tools into the teaching process. Analysis of the responses leads to the conclusion that teachers' digital skills are moderate, with particular emphasis on their ability to design activities, adapt materials and critically evaluate AI-generated resources. In addition, they are able to recognize the benefits of this technology, such as time optimization, as well as the existing challenges, such as limited resources, lack of training and general lack of knowledge, which prevent the appropriate implementation of AI in their teaching work. Finally, teachers are also committed to integrating emerging technological tools within an ethical framework. They are also concerned with ensuring that students are responsible users of AI.

Finally, this research revealed the importance of proposing options that integrate the use of AI in teaching English as a foreign language to reinforce different skills. Consequently,

a guide of activities was designed that meets the needs of teachers and students by facilitating the pedagogical implementation of this technology through reflection processes and opportunities to develop critical thinking about the ethical and responsible use of AI. Likewise, the proposed guide was designed considering the current Ecuadorian curriculum and the pedagogical guidelines suggested by the Autoridad Educativa Nacional [National Education Authority] to address diversity in the classroom; that is, the principles of the UDL have been included to achieve the effective development of communication and digital skills in all second-year high school students. Finally, in terms of feasibility, the proposed activity guide includes only AI tools with free features to reduce potential accessibility gaps as much as possible.

## **6.2. Recommendations**

Once the conclusions of this research have been established, a series of suggestions derived from the findings are proposed; these seek to guide the optimization of practices related to the use of AI in reinforcing English language writing and the practical application of the results achieved. Consequently, the following recommendations are mentioned:

With regard to the shortcomings diagnosed in writing, it is essential to recognize that, although students are responsible for their own learning, the teacher retains their role as a guide and, for this purpose, should implement methods, strategies and techniques that are in line with the students' reality. For example, the implementation of technological tools such as AI in their classes to strengthen different communication and digital skills. Likewise, the generation of ideas and the development of critical thinking through the integration of AI to reinforce productive English language skills. In addition, it is necessary to address writing skills in a comprehensive manner, without neglecting the process or product approach, in order to fill existing gaps and improve students' communication skills.

In addition, teachers have shown constant concern and commitment to ensuring that AI is used ethically and responsibly. For this reason, it is suggested that future research focus on designing, for example, continuing education programs for teachers that focus on familiarizing the educational community with this technology in order to achieve effective integration. Furthermore, efforts should be made to train teachers in the conscious use of AI in their classrooms; this will make it easier for them to guide their students in order to avoid the indiscriminate use of AI inside and outside the classroom.

Finally, existing literature suggests that the implementation of AI should be balanced; however, this information has been limited to the perceptions of students and teachers. Future research should continue to study the practical integration of AI in order to gain a deeper understanding of the impact this technology would have on students. To this end, the activity guide proposed in this research could be applied and evaluated in a real-world context to determine its usefulness and practicality in the classroom. In addition, the necessary adjustments could be made to improve it.

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## APPENDICES

### Appendix A. Validity of the Estimation Scale (Expert 1)



**UNIVERSIDAD POLITÉCNICA ESTATAL DEL CARCHI**  
**POSGRADO**



**MAESTRÍA EN PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y  
EXTRANJEROS CON MENCIÓN EN ENSEÑANZA DE INGLÉS**

**VALIDEZ DEL INSTRUMENTO DE INVESTIGACIÓN**

**ESCALA ESTIMATIVA PARA DIAGNOSTICAR LA ESCRITURA COMO PROCESO**

Estimada profesional, usted ha sido elegida para participar en el proceso de evaluación del instrumento de investigación.

Agradecemos de antemano sus aportes que permitirán validar el instrumento y obtener información válida, criterio requerido para la investigación. A continuación, le presentamos una lista de cotejo. Sirvase analizar y cotejar el instrumento de investigación cuyo objetivo es: **Diagnosticar el dominio de la destreza de escritura del idioma inglés en estudiantes de bachillerato**. Le solicitamos, sobre la base de su criterio y experiencia profesional, validar el presente instrumento para su aplicación.

Para cada criterio se debe considerar la siguiente escala:

1	2	3	4	5
Nada aceptable	Poco aceptable	Regular	Aceptable	Muy aceptable

CRITERIO DE VALIDEZ	PUNTUACIÓN					ARGUMENTO	OBSERVACIONES Y/O SUGERENCIAS
	1	2	3	4	5		
Validez de contenido					X		Ninguna
Validez de criterio metodológico					X		Ninguna
Validez de intención y objetividad de medición y/u observación					X		Ninguna
Las preguntas responden a los objetivos de investigación					X		Ninguna
<b>Total, parcial</b>					20		
<b>TOTAL</b>	<b>20/20 puntos</b>						

**Puntuación**

- De 4 a 11: No válida. Reformular
- De 12 a 14: No válida. Modificar
- De 15 a 17: Válida. Mejorar
- De 18 a 20: Válida. Aplicar

X

**Datos del Validador**

<b>Nombres y Apellidos:</b>	MONICA NARCISA NARANJO SILVA
<b>Grado Académico:</b>	MAGISTER EN EDUCACION MENCIÓN EN PEDAGOGÍA EN ENTORNOS DIGITALES

.....  
 Mónica Narcisa Naranjo Silva  
 C.C.: 0602115909

En Quito, 15 de noviembre de 2024

## Appendix B. Validity of the Estimative Scale (Expert 2)



### UNIVERSIDAD POLITÉCNICA ESTATAL DEL CARCHI POSGRADO



### MAESTRÍA EN PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS CON MENCIÓN EN ENSEÑANZA DE INGLÉS

#### VALIDEZ DEL INSTRUMENTO DE INVESTIGACIÓN

#### ESCALA ESTIMATIVA PARA DIAGNOSTICAR LA ESCRITURA COMO PROCESO

Estimada profesional, usted ha sido elegida para participar en el proceso de evaluación del instrumento de investigación.

Agradecemos de antemano sus aportes que permitirán validar el instrumento y obtener información válida, criterio requerido para la investigación. A continuación, le presentamos una lista de cotejo. Sirvase analizar y cotejar el instrumento de investigación cuyo objetivo es: **Diagnosticar el dominio de la destreza de escritura del idioma inglés en estudiantes de bachillerato**. Le solicitamos, sobre la base de su criterio y experiencia profesional, validar el presente instrumento para su aplicación.

Para cada criterio se debe considerar la siguiente escala:

1	2	3	4	5
Nada aceptable	Poco aceptable	Regular	Aceptable	Muy aceptable

CRITERIO DE VALIDEZ	PUNTUACIÓN					ARGUMENTO	OBSERVACIONES Y/O SUGERENCIAS
	1	2	3	4	5		
Validez de contenido					X		Ninguna
Validez de criterio metodológico					X		Ninguna
Validez de intención y objetividad de medición y/u observación					X		Ninguna
Las preguntas responden a los objetivos de investigación					X		Ninguna
<b>Total, parcial</b>					20		
<b>TOTAL</b>	<b>20/20 puntos</b>						

#### Puntuación

De 4 a 11: No válida. Reformular  
De 12 a 14: No válida. Modificar  
De 15 a 17: Válida. Mejorar  
De 18 a 20: Válida. Aplicar

X

#### Datos del Validador

<b>Nombres y Apellidos:</b>	TERESA DE JESUS CORONEL HERNANDEZ
<b>Grado Académico:</b>	MAGISTER EN GERENCIA Y LIDERAZGO EDUCACIONAL

*Teresa de Jesús Coronel Hernández*  
Teresa de Jesús Coronel Hernández  
C.C.: 1200883187

En Quito, 18 de noviembre de 2024

## Appendix C. Validity of the Estimative Scale (Expert 3)



UNIVERSIDAD POLITÉCNICA ESTATAL DEL CARCHI



POSGRADO

MAESTRÍA EN PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y  
EXTRANJEROS CON MENCIÓN EN ENSEÑANZA DE INGLÉS

VALIDEZ DEL INSTRUMENTO DE INVESTIGACIÓN

ESCALA ESTIMATIVA PARA DIAGNOSTICAR LA ESCRITURA COMO PROCESO

Estimado profesional, usted ha sido elegido para participar en el proceso de evaluación del instrumento de investigación.

Agradecemos de antemano sus aportes que permitirán validar el instrumento y obtener información válida, criterio requerido para la investigación. A continuación, le presentamos una lista de cotejo. Sirvase analizar y cotejar el instrumento de investigación cuyo objetivo es: **Diagnosticar el dominio de la destreza de escritura del idioma inglés en estudiantes de bachillerato**. Le solicitamos, sobre la base de su criterio y experiencia profesional, validar el presente instrumento para su aplicación.

Para cada criterio se debe considerar la siguiente escala:

1	2	3	4	5
Nada aceptable	Poco aceptable	Regular	Aceptable	Muy aceptable

CRITERIO DE VALIDEZ	PUNTUACIÓN					ARGUMENTO	OBSERVACIONES Y/O SUGERENCIAS
	1	2	3	4	5		
Validez de contenido					X		Ninguna
Validez de criterio metodológico					X		Ninguna
Validez de intención y objetividad de medición y/u observación					X		Ninguna
Las preguntas responden a los objetivos de investigación					X		Ninguna
<b>Total, parcial</b>					20		
<b>TOTAL</b>	<b>20/20 puntos</b>						

### Puntuación

De 4 a 11: No válida. Reformular

De 12 a 14: No válida. Modificar


De 15 a 17: Válida. Mejorar

De 18 a 20: Válida. Aplicar

X

### Datos del Validador

<b>Nombres y Apellidos:</b>	MARCOS GEOVANNY ENDARA ESTEVEZ
<b>Grado Académico:</b>	MAGISTER EN EDUCACIÓN BÁSICA

  
Marcos Geovanny Endara Estévez  
C.C.: 1713010310

En Quito, 15 de noviembre de 2024

## Appendix D. Validity of the Writing Test (Expert 1)



### UNIVERSIDAD POLITÉCNICA ESTATAL DEL CARCHI POSGRADO



### MAESTRÍA EN PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS CON MENCIÓN EN ENSEÑANZA DE INGLÉS

#### VALIDEZ DEL INSTRUMENTO DE INVESTIGACIÓN

#### PRUEBA PARA DIAGNOSTICAR LA ESCRITURA COMO PRODUCTO

Estimada profesional, usted ha sido elegida para participar en el proceso de evaluación del instrumento de investigación.

Agradecemos de antemano sus aportes que permitirán validar el instrumento y obtener información válida, criterio requerido para la investigación. A continuación, le presentamos una lista de cotejo. Sírvase analizar y cotejar el instrumento de investigación cuyo objetivo es: **Diagnosticar el dominio de la destreza de escritura del idioma inglés en estudiantes de bachillerato**. Le solicitamos, sobre la base de su criterio y experiencia profesional, validar el presente instrumento para su aplicación.

Para cada criterio se debe considerar la siguiente escala:

1	2	3	4	5
Nada aceptable	Poco aceptable	Regular	Aceptable	Muy aceptable

CRITERIO DE VALIDEZ	PUNTUACIÓN					ARGUMENTO	OBSERVACIONES Y/O SUGERENCIAS
	1	2	3	4	5		
Validez de contenido					X		Ninguna
Validez de criterio metodológico					X		Ninguna
Validez de intención y objetividad de medición y/u observación					X		Ninguna
Las preguntas responden a los objetivos de investigación					X		Ninguna
<b>Total, parcial</b>					20		
<b>TOTAL</b>	<b>20/20 puntos</b>						

#### Puntuación

De 4 a 11: No válida. Reformular  
De 12 a 14: No válida. Modificar  
De 15 a 17: Válida. Mejorar  
De 18 a 20: Válida. Aplicar

X

#### Datos del Validador

<b>Nombres y Apellidos:</b>	MONICA NARCISA NARANJO SILVA
<b>Grado Académico:</b>	MAGISTER EN EDUCACION MENCIÓN EN PEDAGOGÍA EN ENTORNOS DIGITALES

  
Mónica Narcisca Naranjo Silva  
C.C.: 0602115909

En Quito, 15 de noviembre de 2024

## Appendix E. Validity of the Writing Test (Expert 2)



UNIVERSIDAD POLITÉCNICA ESTATAL DEL CARCHI



POSGRADO

MAESTRÍA EN PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y  
EXTRANJEROS CON MENCIÓN EN ENSEÑANZA DE INGLÉS

VALIDEZ DEL INSTRUMENTO DE INVESTIGACIÓN

PRUEBA PARA DIAGNOSTICAR LA ESCRITURA COMO PRODUCTO

Estimada profesional, usted ha sido elegida para participar en el proceso de evaluación del instrumento de investigación.

Agradecemos de antemano sus aportes que permitirán validar el instrumento y obtener información válida, criterio requerido para la investigación. A continuación, le presentamos una lista de cotejo. Sirvase analizar y cotejar el instrumento de investigación cuyo objetivo es: **Diagnosticar el dominio de la destreza de escritura del idioma inglés en estudiantes de bachillerato**. Le solicitamos, sobre la base de su criterio y experiencia profesional, validar el presente instrumento para su aplicación.

Para cada criterio se debe considerar la siguiente escala:

1	2	3	4	5
Nada aceptable	Poco aceptable	Regular	Aceptable	Muy aceptable

CRITERIO DE VALIDEZ	PUNTUACIÓN					ARGUMENTO	OBSERVACIONES Y/O SUGERENCIAS
	1	2	3	4	5		
Validez de contenido					X		Ninguna
Validez de criterio metodológico					X		Ninguna
Validez de intención y objetividad de medición y/u observación					X		Ninguna
Las preguntas responden a los objetivos de investigación					X		Ninguna
<b>Total, parcial</b>					20		
<b>TOTAL</b>	<b>20/20 puntos</b>						

### Puntuación

De 4 a 11: No válida. Reformular

De 12 a 14: No válida. Modificar

De 15 a 17: Válida. Mejorar

De 18 a 20: Válida. Aplicar

<input type="checkbox"/>
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<input type="checkbox"/>
<input checked="" type="checkbox"/>

### Datos del Validador

<b>Nombres y Apellidos:</b>	TERESA DE JESUS CORONEL HERNANDEZ
<b>Grado Académico:</b>	MAGISTER EN GERENCIA Y LIDERAZGO EDUCACIONAL

*Sra. Teresa de J. Coronel H.*  
Teresa de Jesús Coronel Hernández  
C.C.: 1200883187

En Quito, 18 de noviembre de 2024

## Appendix F. Validity of the Writing Test (Expert 3)



### UNIVERSIDAD POLITÉCNICA ESTATAL DEL CARCHI POSGRADO



#### MAESTRÍA EN PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS CON MENCIÓN EN ENSEÑANZA DE INGLÉS

##### VALIDEZ DEL INSTRUMENTO DE INVESTIGACIÓN

##### PRUEBA PARA DIAGNOSTICAR LA ESCRITURA COMO PRODUCTO

Estimado profesional, usted ha sido elegido para participar en el proceso de evaluación del instrumento de investigación.

Agradecemos de antemano sus aportes que permitirán validar el instrumento y obtener información válida, criterio requerido para la investigación. A continuación, le presentamos una lista de cotejo. Sirvase analizar y cotejar el instrumento de investigación cuyo objetivo es: **Diagnosticar el dominio de la destreza de escritura del idioma inglés en estudiantes de bachillerato**. Le solicitamos, sobre la base de su criterio y experiencia profesional, validar el presente instrumento para su aplicación.

Para cada criterio se debe considerar la siguiente escala:

1	2	3	4	5
Nada aceptable	Poco aceptable	Regular	Aceptable	Muy aceptable

CRITERIO DE VALIDEZ	PUNTUACIÓN					ARGUMENTO	OBSERVACIONES Y/O SUGERENCIAS
	1	2	3	4	5		
Validez de contenido					X		Ninguna
Validez de criterio metodológico					X		Ninguna
Validez de intención y objetividad de medición y/u observación					X		Ninguna
Las preguntas responden a los objetivos de investigación					X		Ninguna
<b>Total, parcial</b>					20		
<b>TOTAL</b>	<b>20/20 puntos</b>						


##### Puntuación

De 4 a 11: No válida. Reformular  
De 12 a 14: No válida. Modificar  
De 15 a 17: Válida. Mejorar  
De 18 a 20: Válida. Aplicar

X

##### Datos del Validador

<b>Nombres y Apellidos:</b>	MARCOS GEOVANNY ENDARA ESTEVEZ
<b>Grado Académico:</b>	MAGISTER EN EDUCACIÓN BÁSICA

  
.....  
Marcos Geovanny Endara Estévez  
C.C.: 1713010310

En Quito, 15 de noviembre de 2024

## Appendix G. Validity of the Semi-Structured Interview Guide (Expert 1)



**UNIVERSIDAD POLITÉCNICA ESTATAL DEL CARCHI**  
**POSGRADO**



**MAESTRÍA EN PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y  
EXTRANJEROS CON MENCIÓN EN ENSEÑANZA DE INGLÉS**

**VALIDEZ DEL INSTRUMENTO DE INVESTIGACIÓN**

**ENTREVISTA SEMIESTRUCTURADA PARA DOCENTES DE INGLÉS**

Estimada profesional, usted ha sido elegida para participar en el proceso de evaluación del instrumento de investigación.

Agradecemos de antemano sus aportes que permitirán validar el instrumento y obtener información válida, criterio requerido para la investigación. A continuación, le presentamos una lista de cotejo. Sirvase analizar y cotejar el instrumento de investigación cuyo objetivo es: **Describir las competencias digitales de los docentes de inglés con respecto al uso de la inteligencia artificial.** Le solicitamos, sobre la base de su criterio y experiencia profesional, validar el presente instrumento para su aplicación.

Para cada criterio se debe considerar la siguiente escala:

1	2	3	4	5
Nada aceptable	Poco aceptable	Regular	Aceptable	Muy aceptable

CRITERIO DE VALIDEZ	PUNTUACIÓN					ARGUMENTO	OBSERVACIONES Y/O SUGERENCIAS
	1	2	3	4	5		
Validez de contenido					X		Ninguna
Validez de criterio metodológico					X		Ninguna
Validez de intención y objetividad de medición y/u observación					X		Ninguna
Las preguntas responden a los objetivos de investigación					X		Ninguna
<b>Total, parcial</b>					20		
<b>TOTAL</b>	<b>20/20 puntos</b>						


**Puntuación**

De 4 a 11: No válida. Reformular  
De 12 a 14: No válida. Modificar  
De 15 a 17: Válida. Mejorar  
De 18 a 20: Válida. Aplicar

X

**Datos del Validador**

<b>Nombres y Apellidos:</b>	MONICA NARCISA NARANJO SILVA
<b>Grado Académico:</b>	MAGISTER EN EDUCACION MENCION EN PEDAGOGIA EN ENTORNOS DIGITALES

  
.....  
Mónica Narcisca Naranjo Silva  
C.C.: 0602115909

En Quito, 15 de noviembre de 2024

## Appendix H. Validity of the Semi-Structured Interview Guide (Expert 2)



### UNIVERSIDAD POLITÉCNICA ESTATAL DEL CARCHI POSGRADO



### MAESTRÍA EN PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS CON MENCIÓN EN ENSEÑANZA DE INGLÉS

#### VALIDEZ DEL INSTRUMENTO DE INVESTIGACIÓN

#### ENTREVISTA SEMIESTRUCTURADA PARA DOCENTES DE INGLÉS

Estimada profesional, usted ha sido elegida para participar en el proceso de evaluación del instrumento de investigación.

Agradecemos de antemano sus aportes que permitirán validar el instrumento y obtener información válida, criterio requerido para la investigación. A continuación, le presentamos una lista de cotejo. Sirvase analizar y cotejar el instrumento de investigación cuyo objetivo es: **Describir las competencias digitales de los docentes de inglés con respecto al uso de la inteligencia artificial.** Le solicitamos, sobre la base de su criterio y experiencia profesional, validar el presente instrumento para su aplicación.

Para cada criterio se debe considerar la siguiente escala:

1	2	3	4	5
Nada aceptable	Poco aceptable	Regular	Aceptable	Muy aceptable

CRITERIO DE VALIDEZ	PUNTUACIÓN					ARGUMENTO	OBSERVACIONES Y/O SUGERENCIAS
	1	2	3	4	5		
Validez de contenido					X		Ninguna
Validez de criterio metodológico					X		Ninguna
Validez de intención y objetividad de medición y/u observación					X		Ninguna
Las preguntas responden a los objetivos de investigación					X		Ninguna
<b>Total, parcial</b>					20		
<b>TOTAL</b>	<b>20/20 puntos</b>						

#### Puntuación

De 4 a 11: No válida. Reformular

De 12 a 14: No válida. Modificar

De 15 a 17: Válida. Mejorar

De 18 a 20: Válida. Aplicar

X

#### Datos del Validador

<b>Nombres y Apellidos:</b>	TERESA DE JESUS CORONEL HERNANDEZ
<b>Grado Académico:</b>	MAGISTER EN GERENCIA Y LIDERAZGO EDUCACIONAL

*Teresa de Jesús Coronel Hernández*  
Teresa de Jesús Coronel Hernández *Hdte.*  
C.C.: 1200883187

En Quito, 18 de noviembre de 2024

## Appendix I. Validity of the Semi-Structured Interview Guide (Expert 3)



UNIVERSIDAD POLITÉCNICA ESTATAL DEL CARCHI



POSGRADO

MAESTRÍA EN PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y  
EXTRANJEROS CON MENCIÓN EN ENSEÑANZA DE INGLÉS

VALIDEZ DEL INSTRUMENTO DE INVESTIGACIÓN

ENTREVISTA SEMIESTRUCTURADA PARA DOCENTES DE INGLÉS

Estimado profesional, usted ha sido elegido para participar en el proceso de evaluación del instrumento de investigación.

Agradecemos de antemano sus aportes que permitirán validar el instrumento y obtener información válida, criterio requerido para la investigación. A continuación, le presentamos una lista de cotejo. Sirvase analizar y cotejar el instrumento de investigación cuyo objetivo es: **Describir las competencias digitales de los docentes de inglés con respecto al uso de la inteligencia artificial.** Le solicitamos, sobre la base de su criterio y experiencia profesional, validar el presente instrumento para su aplicación.

Para cada criterio se debe considerar la siguiente escala:

1	2	3	4	5
Nada aceptable	Poco aceptable	Regular	Aceptable	Muy aceptable

CRITERIO DE VALIDEZ	PUNTUACIÓN					ARGUMENTO	OBSERVACIONES Y/O SUGERENCIAS
	1	2	3	4	5		
Validez de contenido					X		Ninguna
Validez de criterio metodológico					X		Ninguna
Validez de intención y objetividad de medición y/u observación					X		Ninguna
Las preguntas responden a los objetivos de investigación					X		Ninguna
<b>Total, parcial</b>					20		
<b>TOTAL</b>	<b>20/20 puntos</b>						


### Puntuación

De 4 a 11: No válida. Reformular  
De 12 a 14: No válida. Modificar  
De 15 a 17: Válida. Mejorar  
De 18 a 20: Válida. Aplicar

X

### Datos del Validador

<b>Nombres y Apellidos:</b>	MARCOS GEOVANNY ENDARA ESTEVEZ
<b>Grado Académico:</b>	MAGISTER EN EDUCACIÓN BÁSICA

  
Marcos Geovanny Endara Estévez  
C.C.: 1713010310

En Quito, 15 de noviembre de 2024