

**Learners' perceptions using CANVA to create infographics when practicing the writing
skill in face-to-face and online sessions**

Liseth Tatiana Camacho Bueno

Thesis Advisor

Juan Camilo Pérez

Universidad Nacional Abierta y a Distancia UNAD

Escuela de Ciencias de la Educación ECEDU

Master in Pedagogical Mediation in English Learning

2026

Acknowledgement

I would like to acknowledge to my tutors that have been by my side supporting and helping me choosing the right decisions to carry out this research in the best way possible, their pieces of advice and recommendations have made me to think critically and go beyond of what I wanted from the beginning, I also want to thank the institution that gave me the opportunity of growing professionally in this stage of my life giving me excellent tutors and being there to answer every inquiry that came alongside the path.

And of course, I want to thank my family for being the best cheerleaders in the difficult moments or when I thought I was going to give up for one or another reason, their words and actions helped to recharge myself with a boost of hope and calm, every time they noticed my flaws during this master degree, they motivated me by saying and remembering me all the things I have been able to achieve in my life.

I am a truly catholic person, for this and not for last God has oriented all the paths I have had to choose in every field of my life, He gives me the strength I need to overcome every obstacle that appear, during this project this was not an exception, by asking Him to give me wisdom in the dark moments was a support to fulfill step by step, semester by semester.

Abstract

This paper intends to report a mixed method study where qualitative and quantitative instruments are used, regarding English language teaching in a technical and technological institution in Colombia. The main purpose is to explore students' perceptions of the pedagogical mediation involved in using Canva to create infographics, with a focus on how these activities support the development of writing skills in English for specific purposes in the professional training in agronomy and livestock businesses and administrative assistant at SENA. The results were collected through an online survey from a group of apprentices, where the perceptions they have with this technological resource are mentioned and analyzed, as a second instrument a structure interview is applied. Some findings are addressing in terms of perceptions with the use of ICT tools when creating infographics during face-to-face and online sessions.

Keywords: Canva, writing, ICT tools, infographics, English for Specific Purposes.

Resumen

Este documento pretende reportar una investigación basada en métodos mixtos usando instrumentos cualitativos y cuantitativos, en el campo de la enseñanza del inglés en una institución colombiana que se enfoca en los programas técnicos y tecnológicos. El propósito principal es el de identificar aquellas percepciones que los estudiantes tienen relacionados a la práctica de la habilidad de escritura en inglés para propósitos específicos con herramientas digitales, en este caso CANVA, para crear infografías durante las sesiones presenciales y en línea, en formación profesional con grupos de agronomía, empresas pecuarias y de Asistencia Administrativa. Los resultados serán recogidos a través de una encuesta en línea realizada a un grupo de aprendices, donde las creencias que ellos tienen de este recurso tecnológico serán presentadas y analizadas, y como segundo instrumento se aplicará una entrevista estructurada. Algunas conclusiones serán dirigidas hacia las percepciones con el uso de CANVA para crear infografías durante sesiones presenciales y en línea.

Palabras Claves: Canva, escritura, herramientas Tics, infografías, inglés para propósitos específicos.

Table of Contents

Introduction to the Research Study	11
Context of the Research Problem	11
Research Question and Objectives	15
Research Question	15
Research Objectives	16
General Objective	16
Specific Objectives	16
Rationale for the Study	17
Literature Review	21
Introduction to the Literature Review	21
State of the Art	21
Theoretical Framework	27
Constructivism	27
Multiliteracies and Multimodal Learning	27
Cognitive Load Theory	28
Technology Acceptance Model (TAM)	29
Conceptual Framework	31
Writing Skill in EFL	31
Infographics and Writing	32
Canva and ICT Tools	33
English for Specific Purposes (ESP)	34
Perception and Learning Motivation	34

Face-to-Face vs Online Writing Instruction	35
Research Design	37
Methodological Design	37
Research Method	38
Research Approach	39
Context of the Research	41
Population and Sampling Procedures	41
Researcher's Impact	42
Ethical Protocol	43
The Field of Ethics	44
Data Collection Techniques	46
Description and Rationale of the Instruments	47
Online Survey	47
Structured Interview	49
Validation Procedures	51
Introduction to Data Analysis and Findings	53
Data Management Procedures	53
Quantitative Data	53
Qualitative Data	63
Discussion and Conclusions	73
Discussion	73
Research Implications	74
Research Limitations	75

Recommendations for Further Research	76
Conclusions	77
References	79
Appendices	86

List of Tables

Table 1 <i>Preliminary Variables from the Excerpts</i>	64
Table 2 <i>Number: Times the Participant Said Quotes About Those Codes</i>	66
Table 3 <i>Correlated Theme</i>	67
Table 4 <i>Term Frequency (TF) and Inverse Document Frequency (IDF) Cosine Similarity</i>	69
Table 5 <i>Themes and Their Degrees</i>	71

List of Figures

Figure 1 <i>TAM Model</i>	30
Figure 2 <i>Writing Skill Areas in EFL</i>	31
Figure 3 <i>Training Area</i>	54
Figure 4 <i>Using Technological Resources During the Learning of a Foreign Language</i>	55
Figure 5 <i>Using Writing Skill in English in Virtual and Face-to-face Learning Modes</i>	56
Figure 6 <i>Writing Skill in Virtual Learning</i>	57
Figure 7 <i>Writing Skill in Face-to-face Learning</i>	57
Figure 8 <i>Using Infographics in Canva for Practicing Writing Skill</i>	58
Figure 9 <i>Learning Modes to Practice Writing in English</i>	60
Figure 10 <i>Learning Modes When Using Canva for Writing in English</i>	61
Figure 11 <i>General Perceptions About ICT tools, Canva, Infographics and Writing in English</i>	62
Figure 12 <i>Graph of the Latent Semantic Analysis</i>	64
Figure 13 <i>Graph of the Inductive Logic: Mapping Codes to the 5 Theme Model</i>	65
Figure 14 <i>Graph of the Thematic Dominance: Frequency of the 5 Macro-Themes</i>	68
Figure 15 <i>Graph of the Theme Frequency</i>	70
Figure 16 <i>Graph of the Network Graph of Themes Based on Centrality and Inferences</i>	72

List of Appendices

Appendix A *Formats for the Consent Form and Validation Expert Instrument 1* 86

Appendix B *Format for the Validation Expert Instrument 2* 100

Introduction to the Research Study

This paper aims to collect students' perceptions on the use of CANVA application when creating infographics during the development of the writing skills in face-to-face and online sessions. The study is developed into five sections. The first one is called introduction to the research study, there the context of the research problem is explained to give a view of the background of the topic the study is about, alongside the research question and objectives are presented, those are the inquiries that need to be answered, and the rationale of the research problem it means the justification why this research is important to carry out. The second section is related the literature review considered to be a guide during the process of the research; they are a way to help the reader to have comparisons and similarities through the state of art. The following one, it is the research design, there the methodological design is shown to tell the audience what are the instruments used to collect the answers the participants pointed, other important headings in this third segment are the population and sampling procedures, the ethical protocol, the pedagogical intervention and application regarding the process of collection. The fourth part is the data analysis, the findings gathered from the instruments are analyzed through some descriptive processes to get answers to the question and objectives proposed, and lastly the fifth section is about the discussions and conclusions of the research, the research question is answered, the limitations are also presented and some recommendations are given for further studies.

Context of the Research Problem

Research gives the opportunity of inquiring into different educational context such as the recognition of the students' beliefs during the pandemic period, for instance Nguyen T. et al., (2021) mentions that student perceptions of affect and engagement are associated with

students experiencing a greater diversity of learning modalities, knowing that students had to face new learning strategies. That is why, this topic may serve as a reference for future research that benefit a community or population. This paper pretends to know the learners' viewpoints after working the writing skill supported by a particular ICT tool called CANVA and its use during face-to-face and online classes to create infographics. The objective is to acknowledge the perceptions and effectiveness of this application in both learning environments; this related to students' perceptions at the moment of using this technological resource.

The study took place at the national training service: Servicio Nacional de Aprendizaje-SENA, a national public institution holding a legal status, with an independent capital structure and administrative autonomy, ascribed to the Ministry of Labor of Colombia. SENA provides technical training to employees, complementary training for adults, and helps employers and workers to establish a national learning system (Servicio Nacional de Aprendizaje SENA, n.d).

SENA counts with several headquarters inside the national territory, this study was held in Centro Agroempresarial y Turístico de los Andes located in the town of Málaga, Santander; this center focuses on agriculture and livestock technological lines and also the tourist one, these are the main request the population of Malaga demands because the town is well known by its agricultural products that supply the nearby areas of the department, three groups from this center were examined to carry out this research, they have among 8 to 14 apprentices each one.

A rural place creates certain challenges in terms of education, not all the apprentices live in the town, the majority of them have to move to the facilities from the villages, or the instructors need to travel towards them. Another important aspect to consider is the age of the apprentices that attend SENA, the institution offers technical and technological programs and for accessing to them people need to have completed ninth and eleventh grade at school, to be

between 14 to 16 years old to start a course, there is no a limit of age for grown-ups, but a drawback with this population is the lack of technological resources and their uses.

According to a study done by the Departamento Administrativo Nacional de Estadística (DANE, 2021) about education, science, technology and innovation states that a series of tasks that young and adults know to do with ICT tools, it says that people between 25 and 64 years old know only how to copy/paste, send email or attach files, the least they know are to install applications, download programs or create presentation through specialized web pages, (DANE, 2021).

The use of digital technology brings significant aspects for the development of the research, since creating infographics is one the principal characteristics to consider at the moment of analyzing instruments and originating results, to complement this information is essential to remark the situation of the apprentices that will be intervened, some of them have computer and internet, others just computer or cellphones, and the hardest situation is for the ones that live in villages where internet is remote. However, it is mandatory to mention that SENA implemented a program since the pandemic that offers free internet to apprentices that did not have access to internet, thus students can continue with their programs, (SENA, n.d.). Therefore, access to internet is a situation that was covered but not the adequate use of technologies for those ones that have not used a computer before.

Another element to consider for this study is the number of English lessons apprentices receive, not only in towns but also in villages, and with the same amount in both learning modalities, face-to-face and online. The national bilingualism program gives apprentices the opportunity to complement their technological programs through English Specific for Purposes (ESP), it means students learn English based on their academic needs that let them to have a

vision of new working opportunities. This language helps them to be more prepared and open new doors in their future increasing competitiveness, and quality in the service of their companies and to be at the same level as other international institutions, (SENA, n.d).

To carry out the English component, the technician apprentices have to cover 160 hours and the technological programs 320 hours, they can be directed or they can be hybrid, it means they take face-to-face classes but at the same time they work autonomously at home with material that is provided by the instructor. Canva may contribute to ESP because students learn to acquire vocabulary that let them to communicate in their fields, with the compositions of simple phrases or commands they can give recommendations, orders, or explain a process.

Research Question and Objectives

Research Question

What are students' perceptions regarding the use of CANVA application when creating infographics during the development of the writing skill in face-to-face and online sessions?

Research Objectives

General Objective

To explore students' perceptions of using CANVA as a tool to enhance writing skill in face-to-face and online sessions.

Specific Objectives

To analyze how the use of CANVA as an ICT tool impacts EFL students' writing skill in face-to-face and online sessions.

To examine students' preferences to learn writing through face-to-face or virtual instruction.

To recognize students' expectations that use CANVA to create infographics for ESP in both face-to-face and online sessions.

Rationale for the Study

The statement of the research problem comes from a comparison between online classes and face-to-face lessons, having a focus on meaningful ICT tools in both learning environments. CANVA has been used in the writing skill learning context because it is self-exploratory, offers free versions and an excellent ally in the educational field, helping to be practice to learn productive language skill, as Candra et al., (2022) affirms Canva is a form of innovation in learning English for writing skills. Students who have worked this application automatically recognize the digital features found in Canva and then apply them to creative writing activities, for instance through infographics, storyboards, posters or presentations.

Most of the students are people from the countryside in Malaga, Santander whose entire lives have had certain educative limitations, such as lack of internet at home, this was perceived during lessons, schools or institutions with few resources, no internet coverage or dropping out of schools, to have a contrast with this information a study done by Negri (1976) about the support and technological facilities for the rural mobile programs emphasizes some instructions to cover apprentices participation in the implementation of social development projects, these are the determination of technological requirements, regional characteristics, use of human resources, institutional support and general infrastructure; definition of the types of farms predominating in the area so as to establish technical, economic and administrative requirements and possible improvements; investigation of the existing rural economy and the technology used in the region in general and by the typical farms, thus defining the technological requirements of the training, this is a proof of the condition apprentices in the rural area have regarding technological resources, access to ICT tools, lack of flexibility in their learning process, and to be updated with the latest digital skills.

The population taken as sample have similar background as mentioned before, some of them are young adults and adults with no knowledge or access to technological resources, this is notorious when the government through the ICT ministry creates programs to help people from the countryside to use applications that guide them developing different rural activities (MinTic, 2023). A clear example to contrast this reality is the pandemic because when it happened apprentices had to use technological resources, it was a real challenge for them to keep up with their classes, evidence of this was noticeable at the moment they had face-to-face sessions and the instructor had to move to their villages, where there was no even a place for the lessons nor did they have computer provided by SENA, however some of them had their personal laptops that could share with their peers.

To evaluate this research's impact, it is considered the points of understanding how learners adapted to a sudden new methodology, their perceptions of its effects on learning, and their use of online resources. Besides the factor of coping with a second language in terms of production with the learning and teaching of writing; the difficulty increases because in carrying out online learning, the teacher must keep thinking of ways to make learning materials available to students while the access to telecommunication and the internet is very limited (Rahayu, 2021).

Distance Education has been enhanced globally using Information and Communication Technology (ICT). ICT enhanced by distance education is likely to become the most significant driver of cross-border provision, and certainly, it is now (Ananga and Kofi, 2017). It is almost impossible to deny the importance technology has brought to human beings, especially in the educative field, which has been a force to teachers and institutions, students have had to rearrange their learning styles it may affect because they have to deal with not only learning

specific themes but also how to use the new academic tools that come out constantly. Therefore, a topic like this should be treated and studied from several perspectives, always looking for alternatives to use it positively because ICT tools will continue to be an essential part of learning and teaching.

The possible contribution this research seeks is to establish the impact that an online class has, together with the improvement in the face-to-face lessons concerning writing skills. It helps to determine how effective this ICT tool is as a learning strategy in future programs during the English courses.

This research will benefit apprentices by emphasizing writing activities in face-to-face classes. Some of these advantages are described by Larasati et al., (2022) there it is mentioned that people can use writing to create imagined worlds, tell stories, share information, explore who they are, combat loneliness and chronicle their experience an extra opportunity to practice and get knowledge of English as a second language; additionally, students take part of the project in an indirect way through the implementation of the instruments and participating in the process, this will help them to know what research is and how it works.

The institution where the research will be conducted (SENA) will have a positive impact, such as having a new research study with the institution's name, to know that their students are cooperating actively in the findings of possible solutions or answers in an inquiry. Most importantly, the study is based on the two learning methodologies the installment offers: virtual and face-to-face sessions. The contribution in general terms of research is stated in creating a more compiled number of articles/ studies with a topic that is gaining importance in the educational field related to technology and EFL; in this 21st century, where all technology or ICT (Information, Technology, and Communication) become part of human needs, technology

can be a tool to assist in teaching, especially in Language Teaching (Mali, 2015, cited in Larasati et al., 2022).

Consequently, the study contributes to Universidad Nacional Abierta y a Distancia (UNAD), particularly because the university has two academic programs linked to English teaching, this benefits the university because it enhances the repository through citations and collaborations, and promote interdisciplinary studies aligned these programs the university has regarding English language. Lauzon, (1992) cited in Ananga and Kofi (2017) argues that early distance learning models hinged more on matters that borders on education rather than learning, the increased popularity and ease of distance learning has been greatly enhanced by the integration of digital and telecommunication technologies. Moreover, one of the main subjects of the research is distance education which is the institution's philosophy, this can enrich future studies about DE or be a guide for students in their research processes.

Finally, but not least, the personal goals that the development of this research will reach are pointed toward personal and professional growth; the first view concerns the fulfillment of knowing that even with the multiple mishaps this research presents, it is going to be carried out because of the individual satisfaction of achieving a new objective in lifetime. Instructors serve as guides, facilitators, support and their main role is to stand back and allow learners to explore, as they explore the content, activities, they get a deeper understanding and this understanding enables them to be independent (Ananga and Kofi, 2017). It is crucial to mention that the writing skill was chosen due to the time it is given in class to practice it, it is one of the main skills students work on through face-to-face and online, with writing the activities can be analyzed to get improvements, they can be kept or recorded and base on what the teacher perceives new changes to future instructions may be done.

Literature Review

Introduction to the Literature Review

The integration of Information and Communication Technologies (ICT) in English as a Foreign Language (EFL) education has generated increasing academic interest, particularly regarding the differences between face-to-face and online learning modalities and their impact on students' writing development. Previous studies have examined student success rates, perceptions, and levels of satisfaction across modalities, highlighting subtle structural differences and varying degrees of effectiveness in learning outcomes (Spencer & Temple, 2021; Kulzhova & Rodrigo, 2020). In addition, research conducted in Latin American contexts has emphasized the importance of ICT tools in shaping Personal Learning Environments and enhancing language acquisition, while also acknowledging contextual limitations such as restricted access to technological resources (Aguirre, 2021; Ramírez-Mera et al., 2022).

More specifically, the implementation of digital tools such as Canva and the use of infographics have been explored as innovative strategies to foster creative writing, grammatical competence, and vocabulary development (Larasati et al., 2022; Montero, 2020). Collectively, these studies demonstrate the pedagogical potential of ICT in promoting writing skills and student engagement, while also revealing the need for further research that examines students' perceptions of specific digital tools within both face-to-face and online learning environments.

State of Art

The state of art offers a scope of how the topic addressed in this research has been explored in different papers, what similarities can be shown and how they relate to the outgoing study, with a purpose of being used as a guide in the search of new findings, and at the same time having related information that can help to continue the developing of this research, but

mainly to notice the relevance that this topic has aroused, The literature review tends to reveal a lot about the attitude of the researcher and the seriousness of his/her intentions, as well as the level of organization and clarity of thought achieved (Walliman, 2011).

Spencer and Temple's (2021) claims that comparing the structure/components of online and face-to-face formats has identified some subtle differences between modalities. Also, this research focuses on online courses that are offered in a public university, it sought to determine the differences in students' success rates between online and face-to-face courses and traditional undergraduate students. It is shown that students prefer face-to-face classes, but they also show a high acceptance with the teachers/instructors because they have knowledge of different technological resources which facilitate proper feedback, in other words they supply all the students' needs to cover quality in education. The research methodology focuses on the use of existing grade and student survey data, the population used are four-year undergraduate students enrolled in courses that had a minimum enrollment of 10 students and were administered both online and face-to-face, the main research goals are to explore potential differences in student success rates between online and face-to-face courses for full-time, on-campus students as well as understand current student perceptions of online education at the university, the findings were that students are 1.27 times less likely to obtain an ABC in online courses compared to face-to-face courses.

Similarly, Ramírez-Mera et al. (2022) sought to identify how educational modality contributes to the development of Personal Learning Environment (PLE) in the Mexican higher education. For this, two case studies were carried out in online and face-to-face contexts, based on quantitative methods and giving emphasis and analysis on five categories: self-perception, management of information, management of the learning process, communication and

learning experience. The finding was about differences related to social interaction and learning aims. Like Ramírez-Mera et al. (2022), this study employs quantitative methods (surveys and questionnaires) but adopts a mixed-methods approach using the same instruments.

In Colombian regarding the concepts this research is pointing, it is required to bring the ICT tools in the language learning process into consideration, because it can be seen the same flaws in both environments due to the circumstances that might be similar, Aguirre (2021) covers the impact of ICT in EFL education in Colombia, the author presents a qualitative research where he analyses a series of different compilation of documents that he selected regarding ICT in the foreign language teaching process, they correspond to different public and private universities in Colombia, to study this data the author used the coding, annotating, labelling, selection, and summary strategies, after his data analysis he found that a limitation was the lack of understanding the Colombian government has about each of the contexts people are involved in, the conditions and environments where those analyzed documents were developed. Nothing out of context following this present study where the population do not have full access to technological resources due to the government does not cover certain countryside zones.

Kulzhova1 and Rodrigo (2020) show readers how they implemented the new teaching practice in their study, the consequences of moving academic writing classes to online learning due to the COVID-19 outbreak, their objective is to compare online delivery efficacy to face-to-face delivery using student assessment scores, they looked at students' motivation and satisfaction with the online format. The data collection was taken from a survey done to the students, the result suggests there is no significant difference in writing skill acquisition but the learners felt unsatisfied with this learning experience. The first variant

with this research is the topic which came in mind due to the situation lived during the pandemic and the different teaching tools teachers had to look for to create innovative and useful lessons, the writing component is also found and the learning modes that embrace part of the core of this research.

Larasati et al. (2022) worked in: Empowering Student's Creative Writing Ability by Using CANVA, the aim of this research was to investigate how a teacher teaches creative writing by using Canva and what are student's perception on its use as media in writing instruction. The research approach was a case study with a qualitative design with the implementation of three collected instruments, the first through observation while the teacher used CANVA in students writing creative tasks, and a questionnaire followed some interviews.

The population were 18 students from eight grade and also a teacher participated in the process, the observation data and interview were transcribed, coded, interpreted. Meanwhile, the questionnaire data was analyzed using Likert Scale measurement, as discussion it was set that the teacher should use CANVA in their teaching activity, to motivate their students and enrich their knowledge on using various digital media. This paper aims to highlight its relevance and contribution to future research concerning the students' perception with this digital tool, also the same kind of questions the instruments have, Likert scale.

With the rapid increase of the ICT tools in the educational field and CANVA as one of the main sources, it is indispensable to discuss the category within this application that is very common to find in different writing tasks, and not only in education but also in commerce, health programs, statistics among other industries and fields; infographics. This audiovisual mean is used to show particular and precise information about a theme with graphics that help to interpret what it wants to be said or taught. Montero (2020) from University of Pamplona in

Colombia presents her project about infographics as a didactic tool for teaching grammar and vocabulary in a specific high school, where the main goal is to improve the grammatical and lexical competence of seventh and eighth graders through infographics. This study is focused on a qualitative action research design, the data collected is analyzed through the Google Classroom platform where students designed their infographics and posted them. It was found that the virtual modality has greatly affected the education of children due to the lack of resources to practice a new language, which causes a lack of interest on the part of students. The connection that is noticeable in the two researchers is that both want to help students in the practice of new vocabulary and the use of some grammar structures, as infographics are seen as a suitable tool to work on them.

Additionally, it is essential to recognize and give a special mention to the writing skill and the content learners can show through different means to show what they have gotten in their learning process. To have a contrast between this research and a new study, a paper about writing and focused on the Colombian context in the teaching of English as foreign language is kept in mind to show possible similitudes. Vanegas (2022) from Universidad de Antioquia reports a case study about exploring the effects of using authentic materials to foster the comprehension of writing skills among EFL students at a public school with fifth graders in Medellin, he compiled the data through memos, two work samples, and a reflection task; this using codification and triangulation methods, as the population were elementary learners the author chose to work with the interpretation of fables as authentic material to check writing, at the end as result he found that fables not only helped to foster the comprehension of the sentence structure and punctuation mark skills, but also promoted in-class participation, the reflection of values, and vocabulary acquisition. It is expected to have in mind these types of

categories regarding the analysis of the instruments that were applied to the participants of this study.

To conclude, it is elementary to talk about the impact the ICT has produced in the classrooms with the use of new materials in the teaching process. To give a focus on this (Torres and Argudo, 2024) propose an article that examines the transformative impact of Information and Communication Technology (ICT) in English as a Foreign Language (EFL) classrooms, they encompass the analysis of the transformative use of ICT in ILE (Innovative Learning Environment) classrooms, the identification of best practices and tools used by educators, and the recognition of challenges associated with this integration, as database they used ProQuest, ResearchGate, Scopus, Web of Science and Google Scholar, to review the articles they used mixed method techniques, they concluded that with the integration of ICT there are some benefits not only for learners but for teachers too, for instance the effectiveness to improve students language skills, the acquisition of communicative skills using diversity in the teaching methods, and the dynamism students have to learn in a fun and interesting way. As teachers one of the main goals in the teaching practices is to offer innovative, educational and pleasant activities to foster student participation, that is why this topic regarding ICT is inherited in this existing study.

Theoretical Framework

During this section some theories will be mentioned related the foundations that involve this research study, such as Constructivism, Multiliteracies and Multimodal Learning, Cognitive Load Theory and the Technology Acceptance Model (TAM).

Constructivism

As stated by (Gilakjani, P., Mei Leong, & Nizam Ismail, 2013) constructivism is a student-centered approach where the students build their own knowledge and teacher play a role as an advocate in the teaching-learning activities rather than lecturing. Constructivist approach is concerned with building knowledge, there is an opportunity for dialogue or communication, here the teacher start by introduction to topic, defining the scope and objective of the learning, these are the type of instructions learners receive at the moment of creating infographics in CANVA. When the teacher asks about the students understanding is an invitation for the learner to get involved in active learning through interaction between both parts. Theory of constructivism fits into distance learning, due to its mode of delivery with emphasis on learner-centeredness, students can use the knowledge they have acquired with technological tools while doing writing activities to be curious and interact with new digital platform.

Multiliteracies and Multimodal Learning

The term “multiliteracies” has been proposed as the most appropriate to describe, on the one hand, the growing importance of diversity in terms of languages and cultures and, on the other, the parallel and increasingly important impact of new technologies on the development of literacy in modern societies, it refers to two very essential aspects in the creation of meaning nowadays: social diversity and multimodality, (Cope & Kalatzis, 1999, cited in in Tsokalidou, 2012). It also remarks to the variety of forms of communication that relate to information

technologies and multimedia, but also the types of text found in a multilingual and multicultural society.

New means of communication and information create new ways of transmitting meaning, as the written linguistic codes of meanings are connected with visual, auditory, tactile, gestural, and spatial perception patterns of meaning synthesis (Kalantzis, Cope, Stellakis, & Arvanitis, 2019). The abundant multimodal ways to create meaning, where the written word is increasingly part of the auditory, visual, gestural, and spatial context of meaning patterns, make us understand the multiliteracy and multimodality values that are mobilized and circulated across the educational and communicational landscapes (Cope & Kalantzis, 2015), with the age of digitization, the learning can no longer be regarded as a mechanism that merely depends on written words, with this theory it is seen how infographics are becoming a tool to develop literacy skills giving a way of using the writing skill but adapting new methods specially visual and the technological one.

Cognitive Load Theory

The Cognitive Load Theory (CLT) is a psychological theory that attempts to explain psychological or behavioral phenomena resulting from instruction. CLT has mostly focused on how the objective characteristics of the task affect cognitive load and, in turn, learning (Plass, J. et al., 2010). John Sweller, focused on the cognitive demands of the means–ends analysis method used in conventional problem-solving practice, a method in which learners independently solve a large number of problems to develop expertise. Sweller, Chandler, Tierney, and Cooper (1990) state that CLT “is concerned with how cognitive resources are distributed during learning and problem solving, many learning and problem-solving activities impose a heavy, extraneous cognitive load that interferes with the primary goal of the task at hand”

Although the cognitive theory of multimedia learning is a more specialized theory (i.e., dealing with learning from words and pictures), it is consistent with the major features of CLT, particularly with the focus on designing instruction that does not overload the learner's cognitive system (Plass, J. et al., 2010). It is also essential to mention that what is not clear is the criterion for determining a priori when a task is sufficiently complex to be likely to produce cognitive-load effects on learning. In terms of creating infographics cannot be measured the degree of complexity it has, it also can be associate with prior knowledge what makes cognitive process easier to integrate in this case with writing activities, also cognitive overload can occur when too much extraneous material is presented or the material is displayed in confusing ways, infographics are presented in a way students can relate them with other technological tools and tasks.

Technology Acceptance Model (TAM)

Technology Acceptance Model is an intention-based model developed specifically for explaining and/or predicting user acceptance of computer technology (Hu et al., 1999). TAM has been applied in numerous studies testing user acceptance of information technology, for example, word processors, spreadsheet applications, e-mail, web browser, telemedicine, websites, e-collaboration, and blackboard. In TAM, perceived usefulness refers to the degree to which the user believes that using the technology will improve his or her work performance, while perceived ease of use refers to how effortless he or she perceives using the technology will be, (Masrom, M, 2007).

Figure 1*TAM Model**Note.*

Developed by the Researcher

The results, interpreted through the Technology Acceptance Model, reveal that students' perceived usefulness and ease of use of Canva positively influence their learning experience, regarding usefulness they can see that working with this ICT tool is a way to show their English learning progress practicing the writing skill with a different task from the ones they usually have, such as the creation of infographics; for the second variable recalls on the ease of using technology because this software counts as one of its characteristics the usability and easy navigation that people can find when they explore its interface (Masrom, M. 2007).

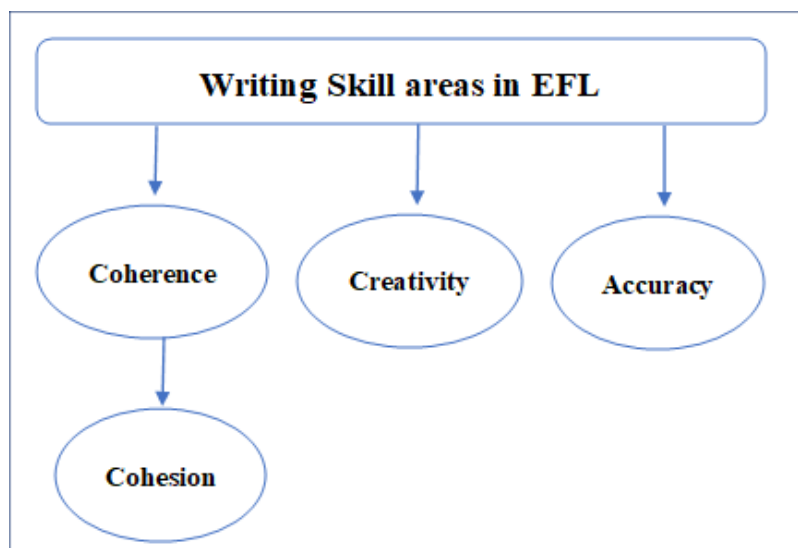
Conceptual Framework

Writing Skill in EFL

Writing is a productive skill that requires students to produce messages and ideas through written texts. It has been considered as one of the significant skills students need to improve for their academic success Gillett et al., (2009). It is essential to have knowledge of this skill to be able of recognizing its features and the types of compositions students may create when practicing writing, also to discover its implications and importance in the learning of a second language. Writing supports students' intellectual growth and expands their cognitive domain as well as enhancing their language skills (Vanegas, A. 2022), however the writing skill implies a series of areas such as coherence, cohesion, creativity and accuracy.

Figure 2

Writing Skill Areas in EFL



Note. Developed by the Researcher

Hyland, (2006) defined coherence as: the ways a text makes sense to readers through the relevance and accessibility of its configuration of concepts, ideas and theories, nonetheless, cohesion is implicit in this process it relates to the linking of ideas within a sentence. At the same time, the creative process of writing involves making choices about our stance, content, structure and language, and creating combinations and connections between ideas and images, Grainger, et al., (2005). Students can explore their creativity through the creation of compositions using different tools where they can write their ideas or thoughts, and writing accuracy refers to “the extent to which the language produced conforms to the target language norms” (Skehan & Foster, 1996).

Infographics and Writing

The term infographics stand for the word combination of “information” and “graphics”. It involves visual representation and text information that is presented in numerous forms. Infographics are a mixture of descriptive text and graphics in the form of charts, bar graphs, diagrams, and pictures (Rezaei & Sayadian, 2015). Using infographics the reader can interpret easily and it makes more appealing to focus on the content is been presented, it is also a mean to check the student progress in their writing tasks creating authentic materials that motivate them to work efficiently. Infographics could only be done in certain specified, exclusive, yet high priced applications such as Adobe InDesign, Adobe Photoshop, and CorelDRAW (Newman & Smith, 2014 cited in Mubarok, 2020). Due to these limitation, only certain users specializing in the design and related professionals could design and create infographics. Nowadays, tools to build infographics come up in various free, low-priced, and easy-to-use programs, there can be found free templates in applications such as CANVA.

Infographics enhance reading and writing skills. Alrwele (2017) claims that infographic can be implemented as an instrument to make students understand the information and able to create instruction easier and accessible. Some of the infographics that are asked to develop to the apprentices in this study are about specific topics since they are learners from particular technician programs, the type of English they practice is based on specific purpose, therefore they have to create infographics about a theme seen in their lessons, such as give commands, recommendations or just to explain a process giving instructions. Infographics can organize ideas in a useful and coherent manner by visually illustrating key concepts and rearranging ideas; this is visual organization that pretends to crystalize information to catch the reader attention.

Canva and ICT Tools

According to Candra et al. (2022) Canva is a visual design tool that makes it easy to create graphics. Canva is an all-in-one design app that allows for creating and modifying visually appealing visuals. This app is ideal for improving writing skills. Canva it is used as a hitch instrument for students, they find it useful, innovate and easy to work which let them to explore their creativity and at the same to put in practice some writing skills, this through the use of entertainment tasks and options that the application offers, students automatically recognize the digital features found in the Canva application and then apply them to creative writing activities.

Canva has many uses for the classroom as to create computer diagrams, whiteboard pictures, photos, book graphics, and cartoons. Canva in writing helps students give visuals, color, photographs, photos, fonts, and graphics; this software supports writing development content include poems, film and TV script plays, fiction (novel and short story), memoirs, freewriting from photographs, and other techniques in the classroom for creative writing

purposes (Durham, 1970; cited in Göçen, 2019), Canva made learners more creative in English writing, and Canva as a technology media helps them to improve the quality of their writing skills. Regarding the software itself Canva is a free mobile application and web-based application to design anything and publish anywhere (Larasati et al., 2022), Canva is a great simple graphic app.

English for Specific Purpose (ESP)

The main pedagogical mediation alongside this research has to be in term of English for specific purposes, this is implicit in the infographics the participant learners had to do as a mean of evidence of their classwork, they had to give instructions or recommendations about a specific process they usually do in their disciplines, as a mean to show what they learnt in their English lessons based on technical topics. English for Specific Purposes (ESP) is teaching with the aim of assisting learners' study or research in the particular variety of English they may need. It has emerged from over 50 years of research and classroom practice and has become a major influence in university and workplace classrooms in many parts of the world, (Hyland, 2022). ESP has been widely adopted in many countries to better address the communicative needs of learners, as it was mentioned this study focuses on three disciplines that learners get with the purpose of being productive in a specific working training. The bilingualism team that SENA offers is intended to have ESP as its foundation in the learning process with the aim that apprentices can acquire communicative English skills in case they have to face or work with foreigners or in case they want to develop their knowledge in an English spoken country.

Perception and Learning Motivation

One of the main concepts this research carries is about students' perceptions using a particular ICT tool to enhance writing skill in face-to-face and online sessions, and according

to Cambridge dictionary a perception is a belief or opinion, often held by many people and based on how things seem. Some studies conclude that, while students learn more via active learning, they may report greater perceptions of their learning and greater enjoyment when passive approaches are used (Deslauriers et al., 2019). The study that Nguyen T. et al., (2021) realized show results in terms of the impact of motivation and engagement, they agreed students whose classes used only passive-learning techniques reported lower levels of engagement, satisfaction, participation, and motivation when compared with students whose classes incorporated at least some active-learning elements, in this article the preferences for synchronous vs. asynchronous modes of learning follows similar trends students who prefer live classes mention engagement and interaction most often while those who prefer recorded lectures mention flexibility. Students' motivation and preference are among the fundamental factors for effective and useful learning and achievement, active and highly motivated students will spontaneously involve in activities without expecting any external rewards, meanwhile to encourage a low motivated student, external rewards are needed to convince students to participate in activities.

Face-to-Face vs Online Writing Instruction

Face-to-face instruction is known as traditional instruction, which is concerned with the teacher being the controller of the learning environment and plays the role of an instructor, but also letting student to explore by themselves with the choices of their learning process, in the independent exploration of the content by students that will lead to a deeper understanding (Ananga and Kofi, 2017). Face-to-face learning is the educational format that has been for years, then it is perceived that students and the educational community may feel more confidence in receiving their knowledge by this mean, however in the last years with the peak of distance education, learners have become aware of new learning styles/methods, and their perspective has

evolved receiving every learning mode as important ones, Ananga and Kofi (2017) also state that online learning which operates in distance learning format increases learning opportunities for those geographically separated. While Online Learning or eLearning which according to eLearningNC.gov (2016) defines it such “delivery of a learning, training, or an educational program by electronic means.”

Most researchers claim that students’ performance and skill acquisition do not show a significant difference through online and face-to-face learning (Paul & Jefferson, 2019), however, there is not enough information about student performance in academic writing courses via online platforms compared to in-class format, although there are a variety of online teaching products for language instruction nowadays, the number of tools that develop academic writing skills is quite limited. Critical factors can affect student satisfaction in online learning, but the student engagement, motivation, and teacher-student communication are the vital factors. More students feel as engaged in online classes as in the classroom; however the quality and intensity of their learning experience have decreased slightly, it might be caused by the “emergency” transition to online learning mode. Kulzhova and Rodrigo (2020) say that it is beneficial to investigate and suggest the tools to motivate students to see the course through and complete their online assessments, despite most tools are created for general language instruction, there are not enough instruments that support academic writing skills. Therefore, further research should analyze the online students’ needs and responses in deeper depth to suggest new implementations to existing online platforms or propose better teaching solutions.

Research Design

The methodological framework is intended to mention, explain and describe the type of research this study will be using alongside its development, the different techniques that will be taken into consideration to carry out a research project, the different instruments and the sampling population whom these procedures will be applied to, all of these steps will allow to determine and answer the research question the paper is setting; by methods, we mean that range of approaches used in educational research to gather data which are to be used as a basis for inference and interpretation, for explanation and prediction (Cohen et al., 2007).

Methodological Design

This research examined students' perceptions while using CANVA to create infographics at the moment of practicing the writing skill in face-to-face and online sessions; for carrying out the study, a mixed method was applied, qualitative and quantitative techniques are found; this explores understanding, describes, generates, and help to discover phenomenon. By using mixed method approach the study benefits from having a support that each method presents, while just using one may minimize the possible expected finding, the combination of quantitative and qualitative instruments supports the interpretation of the perceptions students want to express, and this contributes to a holistic analysis of the research problem.

Quantitative analysis deals with data in the form of numbers and uses mathematical operations to investigate their properties (Walliman, 2011). Quantitative instruments are used to make comparisons, test hypotheses, control, explore, explain; in this study quantitative is essential to measure the benefits using Canva has inside the writing activities using infographics. Most surveys result in quantitative data, e.g. numbers of people who believed this or that, how many children of what age do which sports, levels of family income, etc. To know exactly these

benefits Likert Scales questions are found in the survey that is proposed in this study, Mohn, 2024 remarks Likert scales assume that people's opinions range across a fixed, horizontal span. Respondents choose one of the answers in the horizontal scale to show their feelings and attitudes about statements or questions presented by researchers, the Likert scale allows the respondents to indicate their agreement, disagreement, or neutrality, a Likert scale often includes five, seven, or nine possible responses, with the middle response being the neutral option.

Once the applied instruments are collected and organized, an analysis will be held to recognize the different perceptions and beliefs learners have about the components the research is focused on, such as the use of ICT tools, the writing skill, the application Canva and the creation of content, and the learning modes students prefer when practicing a foreign language this in terms of the online survey, but with the structure interview that will be done through the Google Meets a platform where the researcher and the population will have direct contact to focus on the perspectives the sampling have regarding the research question .

Research Method

This study adopted descriptive research method which describes the characteristics of the population or phenomenon that is being studied (Manjunatha, 2019). This method focuses more on the "what" of the research subject rather than the "why" of the research subject. Descriptive research then, refers to research questions, design of the research and data analysis in this research, it means to explore and interpret perceptions learners have related an application that they are using at class and how they receive to the uses of infographics during writing tasks.

Descriptive research draws on surveys to gather data as it helps to define respondents' characteristics to have conclusions specifically about attitudes and opinions in specific issues. With descriptive research the data can be measured using statistics which facilitate the data

analysis process, descriptive research can contribute to this study to establish comparisons, this as a mean to understand how different groups respond to a certain inquiry (Manjunatha, 2019), for this study a survey based descriptive research is conducted because it is pretended to collect students' perceptions for those attending both learning modes, face-to-face and online sessions.

There are some reasons to consider survey based descriptive research, for instance they are relatively inexpensive to perform, they often allow quick data acquisition, and appropriately drawn sample from a target population can provide accurate and representative data. For this study the survey contained Likert scale sections and some open-ended questions that had some specific categories, it was also validated by two research experts. Another reason to conduct a survey based descriptive research is because the answer response rates are summarized with simple descriptive statistics (Panacek, 2008), it helped at the moment of analyzing the data collected.

Research Approach

For carrying out the study, mixed method research (MMR) is implemented; following Cohen et al., (2018) points that MMR focuses on collecting, analyzing and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches, in combination, provides a better understanding of research problems and questions than either approach on its own.

Quantitative data can be measured, because it contains some form of magnitude, usually expressed in figures. You can use mathematical procedures to analyze the numerical data. These can be extremely simple, such as counts or percentages, or more sophisticated, such as statistical tests or mathematical models, (Walliman, 2011). Quantitative data helps to measure people's

opinion about a particular topic, here the structure interview is a means to obtain people's perceptions regarding the research that are not covered through the first instrument.

Context of the Research

As it was mentioned at the beginning, the research was developed at SENA which is the national public institution that provides technical and technological training to people for better working conditions. The selected population belongs to the headquarter named Centro Agroempresarial y Turístico de los Andes located in the town of Málaga, Santander; and the participants for holding the study are three groups from this place two of them took face-to-face lesson and the other online sessions, the data collection, the analysis and possible findings are going to be gathered with them, in the following section it is explained more detailed the sampling and population.

Population and Sampling Procedures

Some aspects of the learners' background require mentioning. The age range of the participants is between 15 and 35 years old, with a few learners being over 40 years of age. They were enrolled in three specific programs: two technological programs (Agronomy and Livestock Businesses) and one technical program (Administrative Assistant). The technological programs included English instruction delivered in a two-month course, whereas the technical program offered only one English course. Schedules varied according to school hours; the technological programs were conducted during the day shift, with four hours of instruction each weekday, while the technical program was offered during the night shift, with three hours of instruction per day. The SENA methodology for English competence is based on English for Specific Purposes (ESP), in which apprentices are required to learn content related to their academic programs in order to interact with potential foreigners at a basic level of English.

The population has to complete the competence as part of the curriculum in each program, they also worked with the application that is one of the components of this study, these

apprentices will be interviewed (through an online survey and a structure interview) to gather their perceptions of the moment of using the CANVA software when creating infographic in their writing activities. Factors such as expense, time, and accessibility frequently prevent researchers from gaining information from the whole population (Cohen et.al, 2007).

There are two main methods of sampling (Cohen and Holliday 1979; 1982; 1996; Schofield 1996, cited in Cohen et.al, 2007). The researcher must decide whether to opt for a probability (also known as a random sample) or a non-probability sample (also known as a purposive sample). A probability sample will be used due to the sample will be randomly chosen, each group counts with 8 to 12 learners due to in this center apprentices take the English competence by the end of their programs, and by this time the majority of them have already quitted, that is why there are found small groups. It will be a generalization that it will have a representativeness of a population, expecting that the remaining apprentices will willing to participate in the study, at least it is expected to have 15 survey respondents and 5 interviewees.

Researcher's Impact

There exist some statements to review the research impact; however, it is necessary to explain the role of the researcher, which is the scientific one. According to the journal *Researcher Life (2022)*, the primary role of a researcher is to conduct research through experimental studies, literature reviews, or qualitative studies, including designing experiments and writing reports, while being honest, objective, and scientifically accurate when presenting results. The researcher's personal goals are oriented toward personal and professional growth, emphasizing individual satisfaction, learning, and contributing to the educational community by helping learners acquire a foreign language through innovative and enjoyable strategies. Another

important impact of the research is the opportunity to integrate new technological resources, such as CANVA, as accessible and effective tools in the English learning field, fostering motivation, engagement, and better learning environments for both teachers and students.

Ethical Protocol

Ethical issues may stem from the kinds of problems investigated by social scientists and the methods they use to obtain valid and reliable data (Cohen et al., 2007). As in every field honesty, values and professionalism must exist at the moment of carrying out a research study, this to give accurate findings and specially because when research is set is thought on specific results that can benefit the community, hence this study wants to point to establish necessary and coherent patterns to guarantee everybody will have a transparent participation not exposing or showing more than needed. It is vital to recognize different international and local laws concerning ethics on research, Dooly et, al. (2017) says on the international research that explicit protocols concerning collection and treatment of data as well as use of data for publications and other academic output will be elaborated to cover as many of the ethical requirements of the countries as possible, the ethical considerations concerning the collection and handling of data in each country will be the direct responsibility of the collaborating researcher in that country, that is why the research of this study has to identify and know the Colombian laws in ethics research the country where it is taken place.

In Colombia the ethical protocol for carrying out a research involves the knowledge of Ley 1581 de 2012 (set in the government website Función Publica), this law establishes and regulates the data protection in Colombia, when it comes to research it ensures the researcher fulfill a series of aspects to guarantee he/she is acting responsibly; some of them are to get authorizations for the data treatment (consent form), organizing the data to be used for research

purposes explicitly, and the privacy principle that mention the research has to keep the information safe even after the study is finished. In this research this law can be seen in the consent form where it is explained to the participant these principles before they accept to be in.

Simultaneously with the previous law, the participants' rights must take into consideration, Ley 1266 de 2008 focuses on the law on Habeas Data, Función Pública website states that the Colombian legislation supervise the management and protection of personal data, here individuals or participants must have control over their data and be informed about how it would be used, they can have access about their personal information at any moment, they can correct or even delete what they do not want to be used about them in the research. During this study if any participant wishes to have access of the process, they will have the right to do it and if they want to stop participant it will also be considered by the researcher.

The Field of Ethics

Ethical principles are not absolute, generally speaking, though some maintain that they are as we shall see shortly, but must be interpreted in the light of the research context and of other values at stake (Cohen et al., 2007). As Hammersley and Traianou (2012, cited in Cohen et al., 2018) argue, research ethics is not only about treating people correctly, i.e. procedural matters such as rights, interests and duties, but about the 'primary obligation' to answer worthwhile questions; to pursue, produce, test and defend valid factual knowledge (e.g. descriptions, explanations, interpretations, conclusions, theories etc.), all of this aspects will be followed to accomplish the principles of Ethics, but it will be pointed three main aspects to have in mind during the development of the research, they are ethics based on informed consent,

voluntarism and privacy, in the following passages it will be explained how these principles of ethics are going to be applied in the research.

Informed Consent

According to Diener and Crandall (1978) informed consent is meant as ‘the procedures in which individuals choose whether to participate in an investigation after being informed of facts that would be likely to influence their decisions’. For the survey and structure interview a digital document about some personal questions, and mainly their consent and willing of participating will be sent to their emails, given to them directly, or it is going to be attached in the Google form that they will answer this a way they can open the entire document and read it carefully then the apprentices have to choose if they accept to participate or not by clicking a given option. It will be online due some of the learners are no longer in the program because they already finished their trainee programs and the researcher is not located in the same town, therefore it is easier to establish contact with them through email or instant messages.

Voluntarism

Voluntarism entails applying the principle of informed consent and thus ensuring that participants freely choose to take part (or not) in the research and guarantees that exposure to risks is undertaken knowingly and voluntarily (Cohen et al., 2007). No one will be obliged to participate in the research, they will be informed and they will have autonomy and freedom to accept and collaborate or to reject, neither the learner will have in mind any reward, if they are available to get in it, it will be as a cooperative gesture, and with the aim that they are contributing and being part of a study that it could benefit the institution and the future apprentices, in agreement with Bell (1991: 37, cited in Cohen et al., 2007) the advice is to gain

permission early on, with fully informed consent gained, and indicating to participants the possible benefits for the research.

Privacy

Participants will be acknowledged that their personal information will be kept and it will not be used for other purposes, even their full names and internal information about them are not going to be exposure to have privacy, and because it is not relevant to mention that kind of details in the study. In relation to a report done by the American Psychological Association (1973) for example, ‘Religious preferences, sexual practices, income, racial prejudices, and other personal attributes such as intelligence, honesty, and courage are more sensitive items than ‘name, rank and serial number’, some of these items could appear in the interview but the answers are not going to be presented completely, they will be taken into account just for the moment of analyzing the collected data.

Data Collection Techniques

Walliman (2011) points that qualitative data cannot be accurately measured and counted, and are generally expressed in words rather than numbers, that is why one of the instrument that is going to be analyzed is an online survey (questionnaire) about the use and perceptions learners have when using this application in their writing activities, it is going to be individual online surveys and the most suitable online platform to develop them is through Google form. The qualitative instrument is used to measure, make comparisons, examine relationships and explore the answers collected through structure interviews. Interviews let the researcher be able to create a connection with the participant that allows the researcher to obtain an understanding of the participant’s social reality and capture the rich data of the participant’s words, metaphors, images

and emotions, that is why it is used to catch students perception regarding the research (Rutledge, P. 2020).

Internet-based surveys have moved from being in the form of emails to emails-plus-attachments of the questionnaire itself, to emails directing potential respondents to a web site, or simply to web sites (Cohen et al., 2007). The factor why this technique is adopted is because it is easy to apply, and taking into account that the access to the population is better through online resources; therefore, it is simpler to apply with the learners. Also, when an online survey is implemented, it gives more confidence to the participants because they do not feel the pressure of answering the questions in a limited time or in presence of the researcher or teacher. They can express freely and can think and create answers from their point of view, being honest and concise.

While questionnaire surveys are relatively easy to organize, they do have certain limitations, particularly in the lack of flexibility of response, that is why this research needs to be analyzed by using another instrument, this case a structure interview. Interviews are more suitable for questions that require probing to obtain adequate information. The use of interviews to question samples of people is a very flexible tool with a wide range of applications (Walliman, 2011). There exist three types of interviews: structure, unstructured and semi-structure interviews; the one that will be used with the groups of apprentices is the structure interview.

Description and Rationale of the Instruments

Online Survey

When a survey is employed, several purposes must be noticed, such as evaluating a person's opinion or gathering specific data with a focal point. According to Tuckman (1972), by providing access to what is 'inside a person's head', it makes it possible to measure what a

person knows (knowledge or information), what a person likes or dislikes (values and preferences), and what a person thinks (attitudes and beliefs). To start a survey is necessary to know or have in mind what the purpose of the research is, the different theoretical basis that has been found alongside the study, the objectives to develop, and how practical it can be; with these steps, a clear and specific interview is designed to cover every aspect needed in the research, for instance, with this study some concepts that are expected to treat are the ones about how they perceive their learning process with the use of a tool they do not use as often as they should, the conceptions they have when using an ICT tool, or in general the opinions and beliefs they have about the research topic but in terms of their learning process.

The design of the survey is based on some sections that cover the main topics of the research and that are pointed to work with a Likert scale and some open-ended questions to complement, where they can express their perceptions, opinions or recommendations about every component that will be asked; a number of fifteen concrete questions (Likert scale). A Likert scale is a psychometric response scale primarily used in questionnaires to obtain participant's preferences or degree of agreement with a statement or set of statements. Respondents rank quality from high to low or best to worst using five or seven levels (McLeod, 2023); also, five open-ended questions are found in the questionnaire, Bloom et al. (1956) assure that open-ended questions not only allow us to examine students' knowledge but also improve their essential skills such as observing, analyzing, inferring, and creativity in various subjects. Hence the survey respondent will need little time; some of the considerations to follow at the moment of creating the online survey is that it could be answered quickly, learners do not have to think what to write since the majority of them is just to choose one of the proposed options, and the open questions are few.

Google form was used to administer the survey, students are familiar with, this methodology makes they can complete the survey easily without further inconvenience, the survey is presented in Spanish because students do not have the English language level to understand fully sentences, and they can understand the questions better. The survey format will contain some sections that cover the thematic this research works they as a way to reach possible findings the research question implies, the participant will have six sections: socio-demographic information, use of ICT tools, use of the writing skill, CANVA and content about infographics, learning modes and general perceptions.

The first section about socio-demographic information is to get general background about the person and to identify the technical or technological program apprentices are in, the following is the use of ICT tools there learner will answer two Likert scale and one open-ended question about the opinion they have with technological applications and the learning of a second language, the third section is regarding the use of the writing skill same number and kind of questions as the previous section, students will give their views about this skill and the tasks they perform with it, the next section about CANVA and infographics is the core of the survey there are three questions (four Likert scale and one open-ended) about the knowledge with this application and the perception using infographics in their learning practices; the learning modes part has four Likert scale about their likes to learn English as a foreign language and one open-ended, and finally the general perceptions contain four questions that resume the main topics proposed beforehand but with direct questions, there are three Likert scale and one open-ended.

Structure Interview

Structure interviews are standardized questions read out by the interviewer according to an interview schedule. This type of instrument was chosen because the researcher can have the

autonomy of setting some questions that were designed in advance and they are formulated to be asked directly to the participant looking for deeply answers that cannot be collected in the online survey, a total of 11 questions are going to be found during the interview they are not only about perceptions that is the main topic, but also about the use of CANVA, the writing skill, the learning of English and the use of ICT tools in general.

The interviews were conducted online to ensure participants' involvement. Interviews can be audio recorded in many instances in order to retain a full, uninterpreted record of what was said. However, in order to analyze the data, the recording will have to be transcribed a lengthy process if done in full, recording and transcribing interviews do not rely on memory and repeated checking of what was said is possible (Walliman, 2011), hence the interviews will be taken with an online platform (Google meet) that let to record to be able of having the answers by hand and to transcribe them.

This second instrument, the structure interview is implemented to collect a deeper analysis that learners have regarding their perceptions and personal opinions about the topics the research sets out, those comments and conceptions they could not express through the survey, here in the interview they will be free to express what they want about CANVA what they think about its usability and practicality, the creations of infographics and how they can relate the writing skill with this digital material, how they use the ICT tools, the knowledge they have with the different technological resources to learn and practice English during their lessons. The interview will give a big picture that could not be perceived during the survey due to the instructions a Likert scale has, as in the survey these interviews will be held in Spanish which is the students' native language to give them the freedom to express without limitations.

Validation Procedures

Both qualitative and quantitative methods can address internal and external validity. Internal validity seeks to demonstrate that the explanation of a particular event, issue or set of data which a piece of research provides can actually be sustained by the data and the research (Shadish et al., 2002), here the findings must describe accurately the phenomena being researched, both instruments are going to be analyzed trying to get the most accurate possible interpreting the data to get reliable results using valid strategies to measure the collected information, this is exactly what Leech (2006) points about internal validity it is the ‘truth value, applicability, consistency, neutrality, dependability, and/or credibility of interpretations and conclusions within the underlying setting or group’.

Construct validity is a fundamental type of validity that concerns explanations rather than methodological factors, for instance the meaning, definitions and operationalization of factors, a construct validity in this research is the guarantee of agreement with theories than have been used and brought into the context the research is being developed, for instance having into account the construct of definitions such as CANVA, infographics or ICT. On the other hand, to demonstrate content validity the instrument must show that it fairly and comprehensively covers the domain or items that it purports to cover (Carmines and Zeller, 1979), the instruments present the elements chosen by the research to address and solve the main question, in both instruments they cover what the research is seeking to solve or find, the researcher will assure every question is answer during the survey setting the questionnaire to continue only by answering each question, and during the interview asking every item is proposed in the session.

Reliability is concerned with precision and accuracy; be reliable demonstrates that if research was carried out on a similar group of respondents in a similar context, this study

pretends to be implemented with the same kind of population that came from the same place and with similar educational context regarding academic levels and the location. Reliability as stability is a measure of consistency over time, over similar samples and over the uses of the instrument in question (Cohen et, al. 2018) it is expected to find similar answer due to learners have been using infographics the same number of times they may have similar perceptions on use and creation of them. A measure of reliability is through consistency it can be seen with the length of the data- collection instrument each participant will have the same number of questions for both instruments (survey and structure interview), and the nature of the variable that is being measured or investigated, especially regarding the survey which each category presents the same quantity of Likert scales and open-ended questions.

Content validity refers to the quality of measurement instruments that ensure items adequately cover the construct's domain, here an expert evaluation perform to check the content validity, this process will be taken once the survey is set to be launched with the aim of getting validation and a different perspective from an expert about what needs to be changed or modified before implementing the instruments (Chhetri & Khanal, 2024). For the content validity or adjustment of any of the instruments they will be checked by two researcher experts that will guide the author of this study to make modifications or add any valuable comment.

Introduction to Data Analysis and Findings

To collect the answers for the presented research objectives the two instruments are analyzed considering some variables that will be explained into each instrument. A recognition of learners' perceptions is measured to determine the validity the use of infographics through the application Canva has at the moment of practicing the writing skill, during the collection of the instruments three groups that belong to Centro Agroempresarial y Turístico de Los Andes (SENA) in Malaga, Santander were taken as samples, two of the received the lesson face-to-face and the other through virtual sessions.

Data Management Procedures

This study followed a mixed-methods approach by integrating data from the online survey and structured interviews. Quantitative data from the survey were automatically compiled through a digital platform and coded numerically to calculate frequencies and percentages across the five established categories. Open-ended responses were analyzed using thematic coding to identify recurring patterns.

For the six structured interviews, audio recordings were transcribed and examined using inductive coding and Latent Semantic Analysis (LSA). A term-document matrix was created to identify word frequency and semantic patterns across participants' responses. Finally, data triangulation was conducted to compare survey and interview findings, ensuring validity and reliability. All data were stored securely, and participants' identities were anonymized to maintain confidentiality.

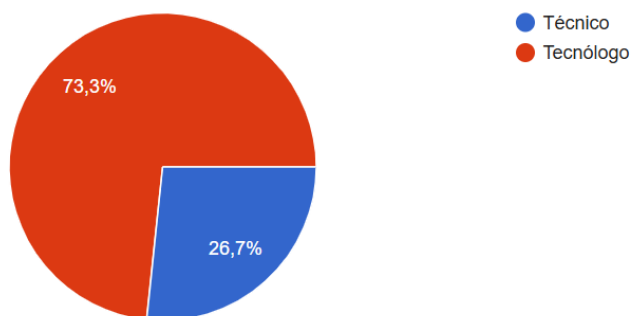
Quantitative Data-Online Survey

To better understand the perceptions that learners have about the use of the application Canva when practicing writing, an online survey was administered. The most important aspects

were analyzed in the following sections, a total of 15 apprentices took the survey and they belong to three technical training programs at SENA, two of which had face-to-face English lessons and the left one through virtual learning sessions. The most relevant findings were analyzed concerning the five categories which were (use of ICT tools, use of the writing skill in English, Canva application and content about infographics, learning modes and general perceptions). The survey contains Likert scale and open-ended questions.

Figure 3

Training Area

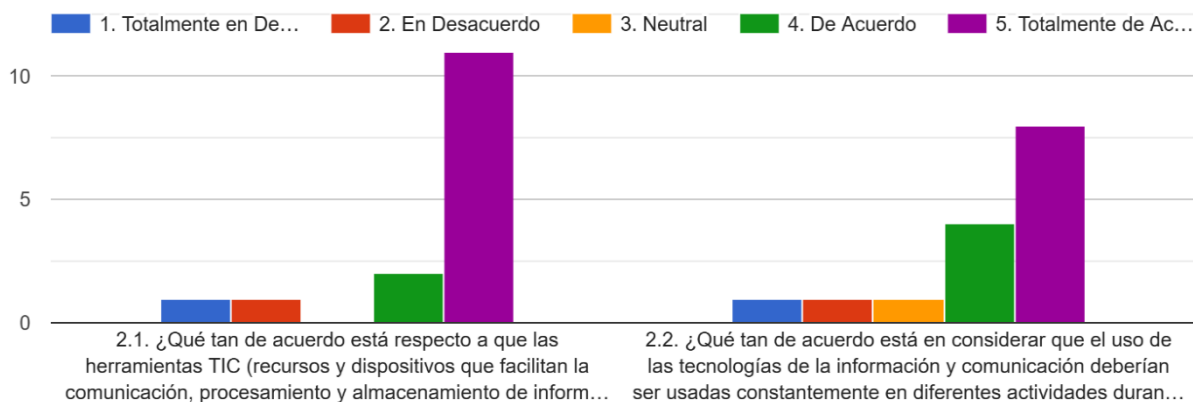


Note. Data gathered from Google Forms.

The first aspect to mention is taken from the demographic information with the more significant data, the 73,3% survey respondents are from technological programs (agronomy and livestock businesses) and the 26,7% belongs to a technical program (administrative assistant), also the majority of the answers come from people that are between the 15-25 years old range, the three training programs mentioned about their living place, countryside is the most named. As an extra question in this section apprentices chose what skill is the one they get more difficulty when learning a language, the main answer is writing.

Figure 4

Use of ICT Tools: Using Technological Resources During the Learning of a Foreign Language



Note. Data gathered from Google Forms.

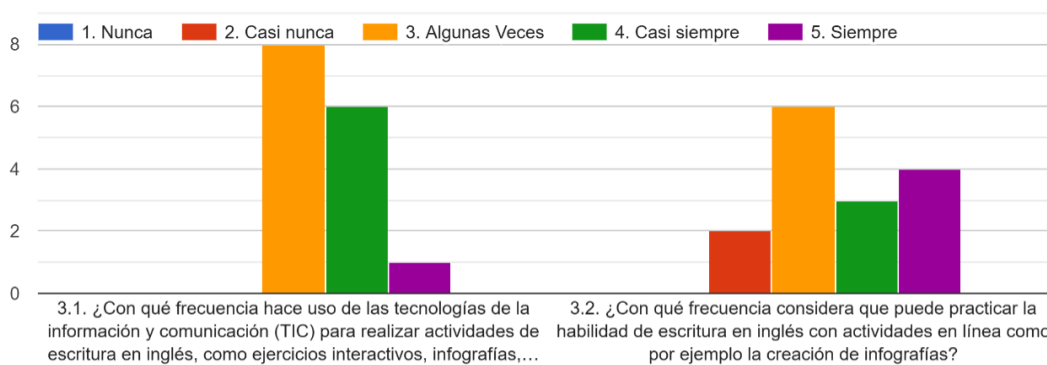
There are two major questions about this topic: ¿Qué tan de acuerdo está respecto a que las herramientas TIC (recursos y dispositivos que facilitan la comunicación, procesamiento y almacenamiento de información) son necesarias para el aprendizaje de un idioma extranjero el cual es uno de los conceptos esenciales en la realización de este estudio?, and ¿Qué tan de acuerdo está en considerar que el uso de las tecnologías de la información y comunicación deberían ser usadas constantemente en diferentes actividades durante la clase de inglés, como por ejemplo en la realización de presentaciones, evaluaciones formativas o documentos? Through a Likert scale 11 apprentices agreed that the use of ICT tools is necessary for the learning of a foreign language, on the other side 8 learners considered the use of ICT should be used constantly when doing English activities in class such as presentations, formative assessment or documents, 3 apprentices disagreed or neutral with this question. Regarding the open ended

question the apprentices mentioned some advantages and disadvantages using ICT resources, some of them are “I understand in a better way the language”, “flexibility and comfort with the connectivity schedule”, “in people with visual learning styles these interactive digital tools let to get the information easier”, the contrast of these answer were “dependency technology”, “lack of knowledge some people have when using these applications”, “not everyone has ICT access”. As it was expected there are different perceptions with a topic that is still in practice when learning a foreign language comes out.

Figure 5

Using Writing Skill in English in Virtual and Face-to-face Learning Modes

En una escala del 1 al 5 donde 1 es "Nunca" y 5 es "Siempre"



Note. Data gathered from Google Forms.

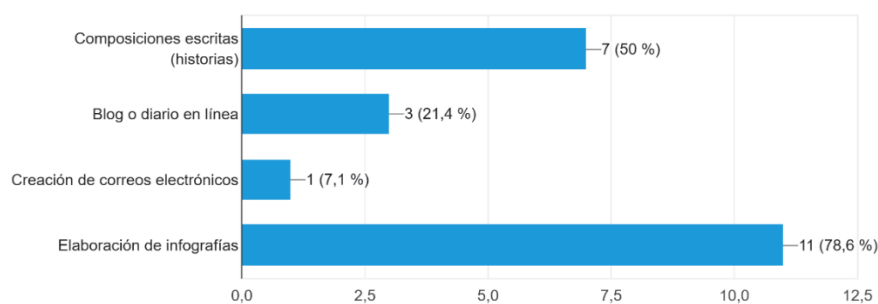
This section starts with two Likert scale using adverbs of frequency where 1 is never and 5 always. To the question about how often they use ICT to create writing activities in English like infographics or blogs 8 of the 15 apprentices said sometimes, 6 almost always and 1 always. On the other hand, the frequency of apprentices that consider can practice writing skill in English

with online activities like the creation of infographics were similar in the responses, 6 learners pointed sometimes, 4 always, 3 almost always and 2 almost never.

Figure 6

Writing Skill in Virtual Learning

¿Ha practicado la habilidad de escritura en la clase de inglés del SENA manera virtual?, cuál de las siguientes actividades le ha llamado la atención:

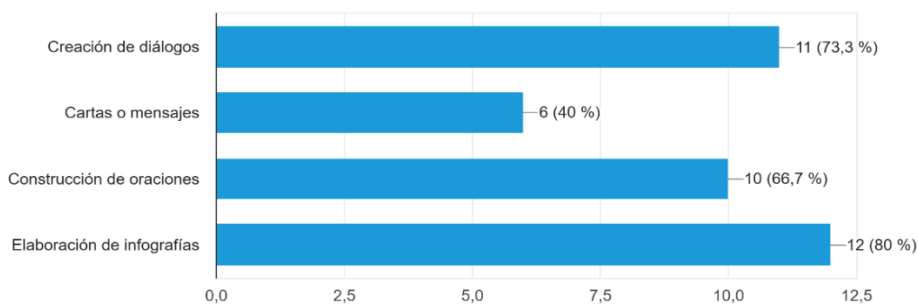


Note. Data gathered from Google Forms.

Figure 7

Writing Skill in Face-to-face Learning

¿Ha practicado la habilidad de escritura en la clase de inglés del SENA manera presencial?, cuál de las siguientes actividades le ha llamado la atención:

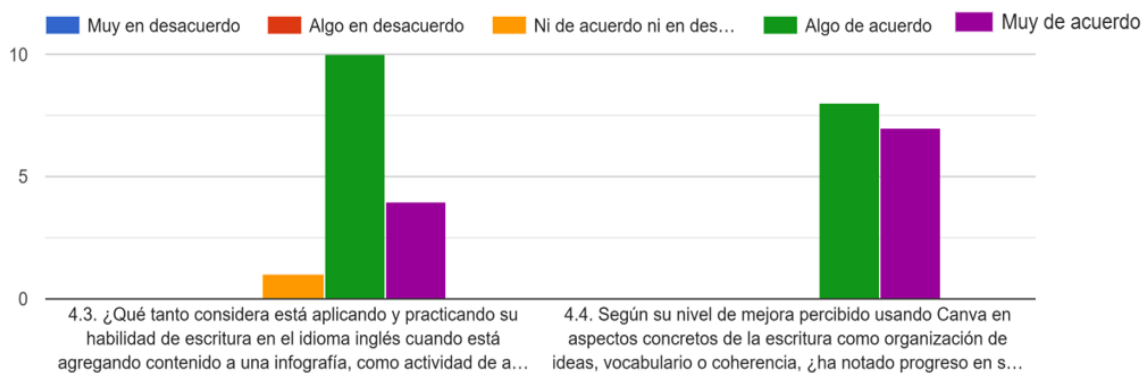


Note. Data gathered from Google Forms.

To itemize figure 6 and 7 it is indispensable to clarify that 14 of the survey respondents took English classes in both learning modes mentioned, just one participant marked no. Then a series of writing activities were listed in order to choose the ones they had used previously, they could select more than one option. In relation to the creation of infographics one of the main categories analyzed in this research 11 (virtual) and 12 (face-to-face) apprentices placed they used this means for writing in English; 7 apprentices had practiced through writing compositions and 3 with blogs or online diaries in virtual lessons; meanwhile, 11 learners had created dialogues, 10 with creation of sentences and 6 apprentices with cards or messages in face-to-face mode.

Figure 8

Using Infographics in Canva for Practicing Writing Skill



Note. Data gathered from Google Forms.

In the two main Likert scale questions for this section the participants were asked if they consider they are practicing English when they add content to an infographic, they opted for the positive choices: 10 of the 15 marked they partially agree and 4 totally agree, just 1 was neutral about this statement; in accordance with the other question that is about the progress learners

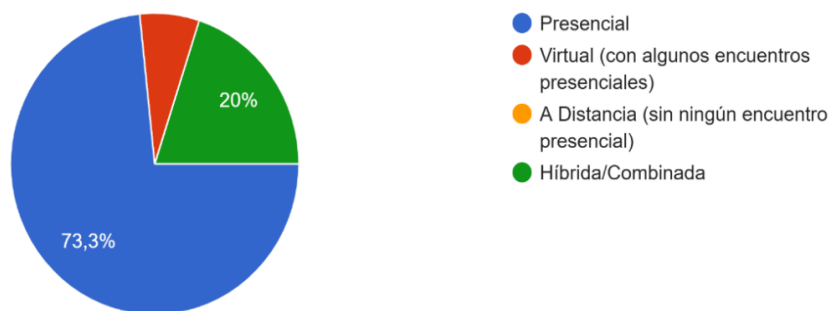
perceived when using Canva for practicing writing in terms of organizing ideas, learning vocabulary or having coherence, it was found some similarity in the responses, 8 answers coincided to partially agree and 7 totally agree, not negative answers were collected in these two Likert scale questions.

This aspect about Canva and infographics let participants to answer two open-ended questions. Participants mentioned some contributions that Canva gives to their writing learning process, some of the replies are “it’s dynamic and creative”, “it makes easier to connect words or texts with images”, “it gives useful tools such as personalized templates, creation of infographics or design of leaflets”, “Canva is a visual tool that help to organize ideas and present text in a clear way, for example with infographics vocabulary can be practiced through the association of word and graphics, also the grammar syntax through a visual mean”. The survey respondents pointed some advantages and disadvantages about Canva, among the advantages some lines that can be read are “it is more effective to connect words or texts with images to appropriate the knowledge”, “lessons are more interactive and funnier”, “better organization of the information”, “it helps to organize texts in English that gives better understanding of what it is pretended to be shown”. On the contrary some disadvantages found are “lack of interaction face-to-face”, “instability with the internet connection”, “at the beginning it is difficult to use because of the unawareness of the platform” or “the limitation with some desirable characteristics because they are premium”.

Figure 9*Learning Modes to Practice Writing in English*

5.3. ¿Qué modalidad de aprendizaje siente que es más efectivo para practicar la habilidad de escritura en inglés según la experiencia que ha podido tener al momento de aprender esta lengua?

15 respuestas



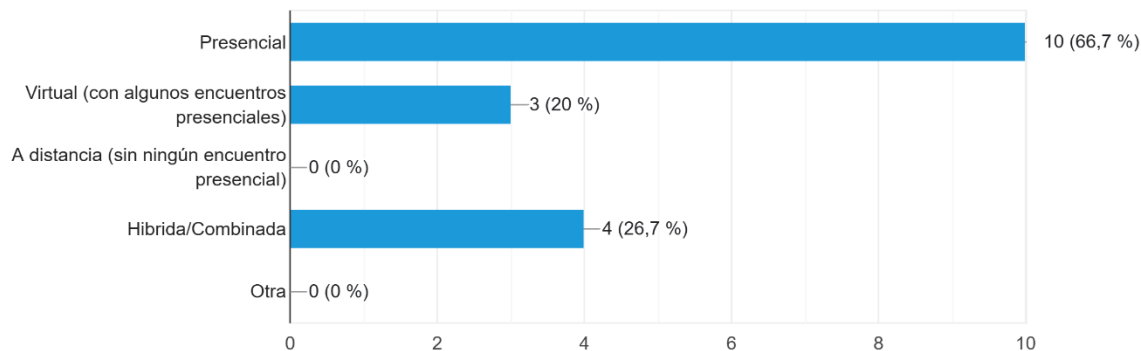
Note. Data gathered from Google Forms.

73% that is equal to 11 apprentices chose the face-to-face learning mode as the best to practice writing skill in English, 20% or 3 respondents said the hybrid mode and just one participant agreed that virtual sessions with some face-to-face meetings are more effective.

Figure 10*Learning Modes When Using Canva for Writing in English*

5.4. ¿En qué modalidad considera que el uso de Canva es más útil para practicar la escritura en inglés?

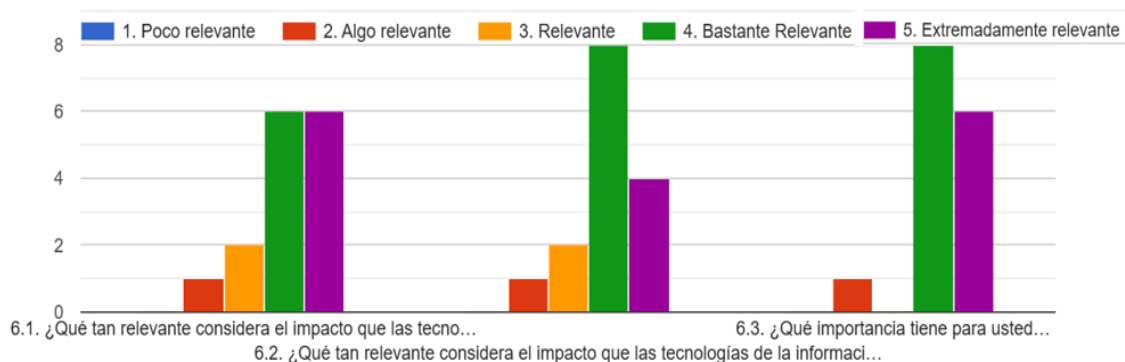
15 respuestas



Note. Data gathered from Google Forms.

The most useful learning mode when using Canva for practicing writing in English based on learners' answers is the face-to-face mode with 10 reactions, following with the hybrid or combined learning mode with 4 replies and in third place the virtual one with some face-to-face meetings, it can be seen a certain parallel with the previous question.

This category outlines an open-ended question that relates the differences between using Canva to teach writing in English in face-to-face lessons and virtual or distance classes, some of the comments are “topics not learnt in the same way”, “the main difference is the accessibility”, “in face-to-face the instructor is there for any doubt meanwhile in distance mode is more difficult”, “in face-to-face the instructors' gestures and pronunciation can be useful to learn” or “learners can share ideas among the classmates in face-to-face, it benefits interaction and feedback immediately”.

Figure 11*General Perceptions About ICT tools, Canva, Infographics and Writing in English*

Note. Data gathered from Google Forms.

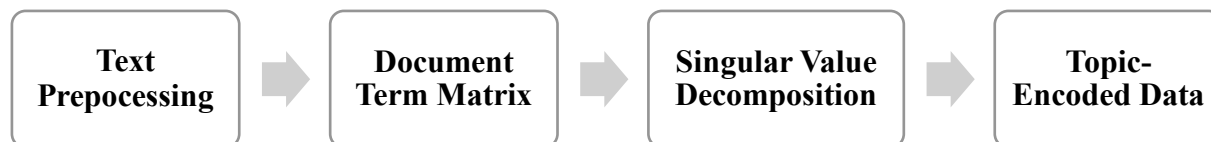
From the three Likert scale questions: ¿Qué tan relevante considera el impacto que las tecnologías de la información y comunicación han traído al momento de aprender un tema en particular de manera virtual, con recursos interactivos y en línea diseñados para lograr el desarrollo de la habilidad escritora en el inglés?, ¿Qué tan relevante considera el impacto que las tecnologías de la información y comunicación han traído al momento de aprender un tema en particular de manera presencial, con recursos interactivos y en línea diseñados para lograr tal finalidad?, and ¿Qué importancia tiene para usted crear infografías en inglés usando las TICs para el aprendizaje de la lengua inglesa?, the researcher chose the one related to the importance the creation of the infographics has in English using ICT tools to learn a foreign language, 8 apprentices marked quite relevant this question, 6 of the respondents said extremely relevant and just 1 pointed a bit relevant. To finish this section participants referred to the experiences they have had using Canva to create infographics in English, some excerpts are “my experience is very satisfactory because is easy and practical to explain a topic”, “design, good compositions and great imagination for people that like infographics”, “it lets an easy and quick adaptation

with the templates” or “practical learning of a language, the improvement of vocabulary, development of the creativity and use of technology”.

To conclude, it is relevant to highlight they are learners’ perceptions about the use of Canva, creating infographics, writing in English, using ICT tools and attending to English lessons through different learning modes, that is why it is important to acknowledge their opinions and points of view each participant has.

Qualitative Data - Structured Interviews

Six interviews were recorded and collected in order to have a wider interpretation regarding the topics and a direct learners’ opinion. Some excerpts were gathered to analyze into some segments according to the variables that are repeated, to have semantic patterns (words and phrases) the six interviews are examined through the Latent Semantic Analysis (LSA), which is a technique discovering statistical co-occurrences of words which appear together and provide further insights to the topic of words and documents, here a term-document matrix is formed from documents. The rows, in this matrix, are individual words and columns are documents, using inductive codes which is interpreting raw contextual data to develop the following themes that are derived from these codes. Specifically, the entries in a term-document matrix contain the frequency which a term occurs in a document, (Mahdipour, et al., 2022).

Figure 12*Latent Semantic Analysis*

Note. Developed by the researcher

Table 1*Preliminary Variables from the Excerpts*

Code Naming	Temporary tag	Excerpt
C1 Pedagogical Mediation	Significant teacher assistance, comments, reports and feedback	“I think the teacher’s assistant is very useful because it is a guide for the interpretations” Adriana H.
C2 Technological Resources	Opinion about Canva and the importance for the writing activities.	“Canva is good, didactic and it helps a lot in terms of writing in English” Astrid S.
C3 Active Didactic Activities	Proactive and effective tasks that improve motivation and comprehension.	“Those interactive strategies that are dynamic help to obtain the information in a better way” Angelica S.
C4 Language Barrier	Difficulty with grammar patterns, vocabulary and mother tongue and foreign language mixed up.	“I sometimes got difficulty understanding the conjugations of verbs” Adriana H.
C5 Visual and Combine Methodology	Knowledge through pictures, colors and matching activities.	“My learning strategy is more visual, therefore when I have the relation between texts and pictures I can remember better” Yasmin C.

C6 Syntactic Structure	Sentence ordering and its structure.	“We could identify the structure of the sentences, where to put the verb and the subject” Diana E.
C7 English for Specific Purpose (ESP)	Correlation between specific technical language (farming and administrative fields) into writing activities.	“The activities helped us with vocabulary focused on our training program in farming” Angelica S.
C8 Specific Learning Strategies	Identification of different learning styles.	“Each person learns different; I prefer to learn with pictures and songs” Astrid S.

Note. This table shows the preliminary codes from the excerpts.

Figure 13

Inductive Logic: Mapping Codes to the 5-Theme Model



Note. Data gathered from Google Colab.

After having these preliminary codes, the quotation of the participants is labeled in those codes, all this for getting full coding pass which is the complete process of analyzing qualitative data to identify concepts. This full coding pass is done through machine learning, and a co-occurrence matrix is used, which, according to Brown and Wiemer-Hastings (2006), it is a specific type of occurrence matrix that captures the joint occurrence or similarity between pairs

of elements, such as the proportion of times two observational units are grouped together across multiple clustering solutions in an ensemble, this matrix is built to determine the frequency of terms found in documents that are recorded enable techniques such as Latent Semantic Analysis (LSA).

From the previous quotation from the interviews new inductive codes have been itemized, using Term Frequency (TF) and Inverse Document Frequency (IDF) cosine similarity help to measure the number of times a term (word) occurs in a document.

Table 2

Times the Participant Said Quotes About Those Codes

Participant	C1	C2	C3	C4	C5	C6	C7	C8
Adriana H.	1	1	0	1	0	1	1	0
Angelia S.	1	1	1	0	0	0	1	0
Angie L.	1	1	1	1	0	1	1	0
Astrid S.	1	1	1	0	1	0	1	1
Diana E.	1	1	0	1	0	1	1	1
Yasmin C.	0	1	1	0	1	0	1	1

Note. This table shows the times of the codes said by participants.

A brief summary of the interpretation of the previous table shows that pedagogical mediation (**C1**) is noticed in almost every participant, technological resource is mentioned by all of them (**C2**), also mostly of the remarked the active didactic activities (**C3**) while learning a foreign language; language barrier and syntactic structure (**C4**, **C6**) shows identical responses among the interviewees, visual and combine methodology with specific learning strategies (**C5**, **C8**) are connected with participants from the livestock and agricultural groups, and everyone mentioned the importance of English for specific purpose (**C7**) through their learning process.

The following step is to integrate these inductive codes into themes that are aligned into the learning approaches, this to bear in mind the main focus the research seeks to get about the use of infographics with a particular ICT tool (Canva) when practicing the writing skill through two learning modes, face-to-face and online. These themes are related to the codes which have similar content that helps to analyze meticulously the inductive codes in fact some of these codes are merged to be part from a single theme because they share similar concepts, this new step also contains excerpts from the recordings gotten in the structure interviews.

Table 3

Correlated Themes

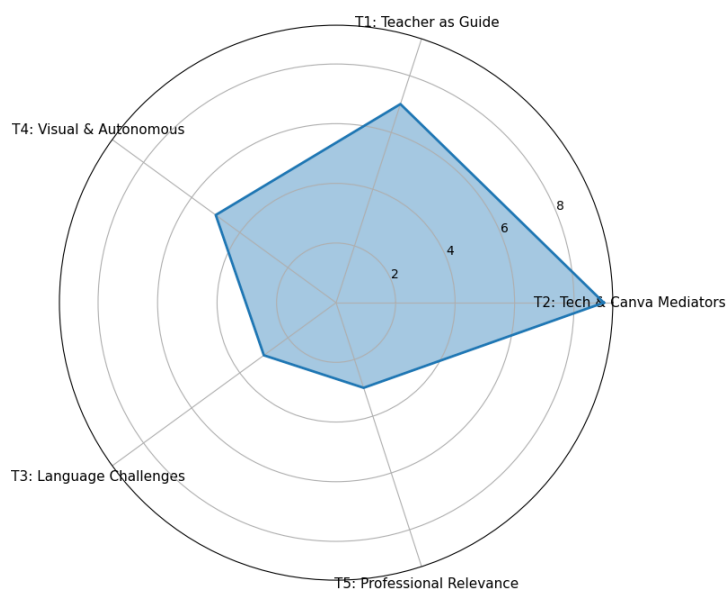
Theme	Codes	Notional reason	Excerpt
T1-Teacher as a mediator	C1 Pedagogical Mediation + C6 Syntactic Structure	Interviewees emphasize the teacher assistance in person, the comments, patterns and the examples in the writing activities.	“The help of the teacher was useful because it is a guide in the presentations, and I could understand the structure of the sentences” AdrianaH.
T2- Digital tools for learning	C2 Technological Resource + C3 Interactive Tasks	Canva and other technological resources make learning to be easy, entertaining and desirable; writing turns appealing.	“Canva is didactic and helps a lot when writing in English” Astrid S.
T3- Obstacles and linguistic processes	C4 Language Barrier + C6 Syntactic Structure	Participants mention problems with verb conjugation and, structure of the sentence, and adapting from Spanish to English.	“I had difficulties with the conjugation of the verbs; also, to think in Spanish and then translate into English” Yasmin C.
T4- Visual learning and personalized	C5 Visual and Combine Methodology + C8 Specific Learning Strategies	Learners detail how pictures, colors and self-teaching methods like songs help to increase the memory.	“I learn better with images or songs, because I have visual learning” Astrid S.

T5- Interdisciplinary significance	C7 English for Specific Purpose (ESP)	Participants associate English activities with their specialty's areas (livestock, agricultural and administrative) in writing.	“The activities helped us with vocabulary based on our training program in livestock management” Angelica S.
--	---	--	---

Note. This table shows the frequency of the codes by correlated themes.

Figure 14

Thematic Dominance: Frequency of the 5 Macro-Themes



Note. Data gathered from Google Colab.

From the previous inductive codes (8) that measure the interviewees' responses five themes were created to regroup them, this to be more concise and have a better overlook of the elements analyzed in this research, here a theme can be associated to one or two codes that share similar patterns. Theme 1 is about teacher as a mediator it encloses codes 1 and 6, there is found content about the teacher mediation through the lessons and specifically with the exposure of the

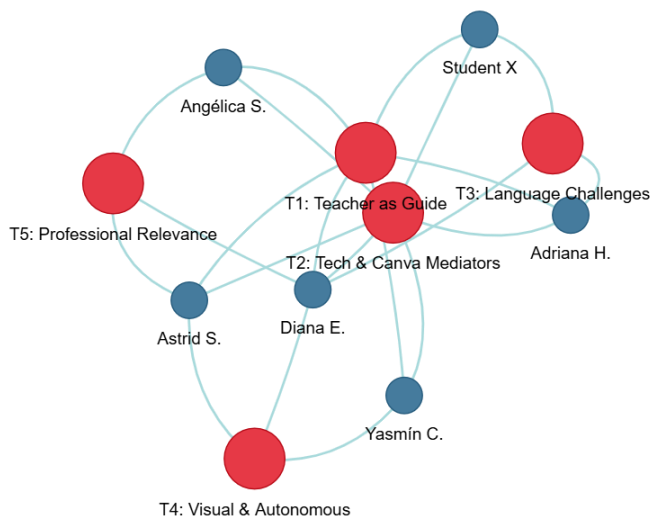
writing skill. Theme 2 is called digital tools for learning which has two codes 2 and 3 in these elements the learner spotlight on the technological resources but the focal point is the application Canva the one they used to create infographics while being in the English course. Theme 3 brings the attention on the obstacles and linguistic process students went through, codes 4 and 6 were included in this theme, they remark the challenges they had with the sentence structure mainly the conjugation of verbs for the different tenses. The upcoming theme 4 combines methodologies and the learning styles that students consider they have, a repetitive pattern is set up where the participants said they learnt through pictures, interactive activities, songs or autonomously, inductive codes 5 and 8 are integrated. Lastly, theme 5 points about disciplinary significance, here students refer about the importance of learning about their own training programs to be able to communicate in possible scenarios where they have to use English as a foreign language, that is why code 7 which is English for specific purpose (ESP) is correlated in this last theme.

Table 4

Term Frequency (TF) and Inverse Document Frequency (IDF) Cosine Similarity

Participants	T1 Teacher as a Mediator	T2 Digital Tools for Learning	T3 Obstacles and linguistic processes	T4 Visual learning and personalized	T5 Disciplinary Significance
Adriana H.	1	1	1	0	1
Angelica S.	1	1	0	0	1
Angie L.	1	1	1	0	1
Astrid S.	1	1	0	1	1
Diana E.	1	1	1	1	1
Yasmin C.	0	1	0	1	1

Note. This table shows the final themes of the participants' frequency.

Figure 15*Theme Frequency*

Note. Data gathered from Google Colab.

Five of six participants aim the relevance of the teacher as a mediator (T1), it means they highlight the importance of pedagogical mediation the teacher has when instruct, about technology (T2) all agree the visibility of Canva during lessons and how they can get immerse with these tools; the obstacles and linguistic processes (T3) were more prominent with participants from the administrative area than the livestock and agricultural ones, meanwhile related to the visual learning and personalized (T4) occurred the contrary to theme three, this was stronger with the farming groups, and in terms of disciplinary significance (T5) all interviewees cited this factor, this shows how meaningful they consider English for specific purpose for their disciplines.

Based on the co-occurrence among the themes it can be built a relational structure that shows connections and strengths, here the themes are measured by the degree in mentions the participants did.

Table 5

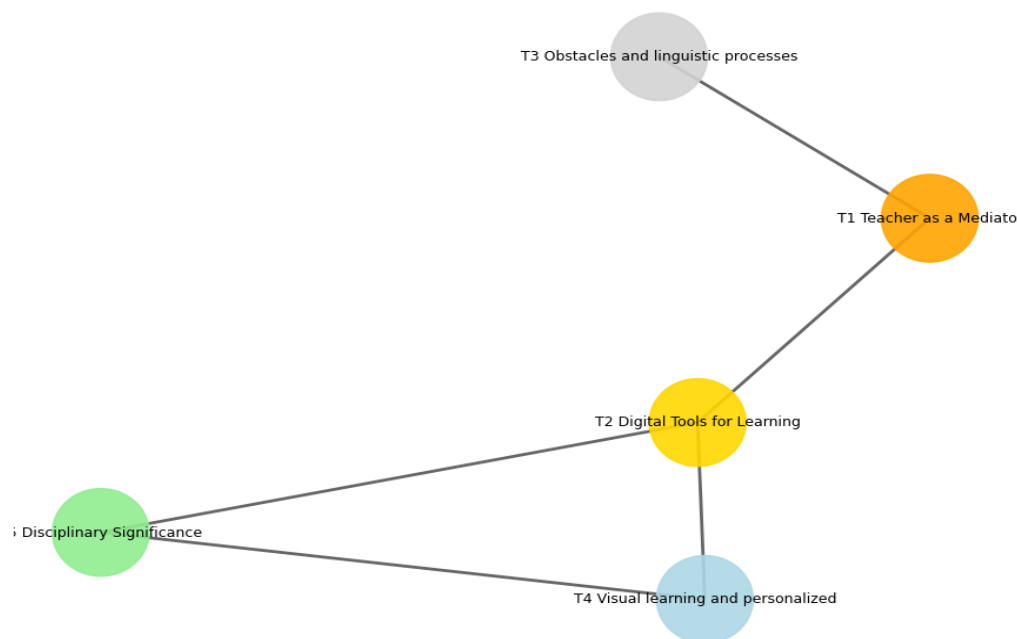
Themes and Their Degrees

Theme	Degree	Inference
T2 Digital Tools for Learning	Highest	It is linked with digital creations concerning learning areas.
T1 Teacher as a Mediator	High	It is the main pedagogical line between digital resources and the challenges of learning a new language.
T4 Visual Learning and Personalized	Average	Correlated to T2 (digital tools for learning) and T5 (Disciplinary Significance).
T3 Obstacles and Linguistic Processes	Minor	It is less coexistence with others.
T5 Disciplinary Significance	Merged	Mentioned by every participant and it related to learning impact.

Note. This table shows the themes classified by their degrees.

Figure 16

Network Graph of Themes Based on Centrality and Inferences



Note. Data gathered from Google Colab.

The above chart shows the degrees of coincidence according to the participants' answers, what topics they mentioned the most and which ones in a lower intention. There is shown that the two main aspects they talked about were about the digital tools for learning and the companion of the teacher as a mediator, it is seen how these two are related to bring into context the main issues of this study. On the other hand, the least discussed ones were about the visual learning and personalized and the obstacles and linguistic process, it means just some of the participants brought these points in their answers, and finally it is found that the disciplinary significance in involve in every response found in the six interviewees.

Discussions and Conclusions

Discussion

The findings got during the data analysis are interpreted according to what is gathered through the two instruments used during the research, but it is remarkable to remind the purpose of this study which is to explore the students' perceptions regarding the use of the application Canva when creating infographics to practice the writing skill in face-to-face and in virtual lessons.

As supported by the work of Spencer and Temple, (2021) they stated that they explored potential differences in student success rates between online and face-to-face courses for full-time, even though in this research the success in students' performance cannot be measured, their opinions about the two learning modalities are analyzed. Also, mentioning these two learning modes need an attachment to the multimodal learning theory, which remarks that knowledge can no longer be seen as a mechanism that only focuses and depends on written words, alongside the analysis of the learners' narratives is notorious that they expect new learning styles where they can combine the face-to-face instruction with virtual environments, this especially to learn a new language and even more for practicing writing.

This analysis also predicts the findings concerning the use of ICT tools when learning a foreign language, previously it was said the importance of using these resources as a means to attract students' attention when learning, and mainly to practice the writing skill; during the implementation of the two instruments this was reflected when apprentices mentioned how vital is to use interactive and dynamic activities that let them to learn using a variety of methodologies different from the ones they had at school. The use of platforms that contribute to make a lesson more effective is also a topic to point out due to the role in this study, specifically the application

Canva and the creation of infographics which they are two terms that have been around the corner because of their relevance to practice writing skill. In the state of art Montero (2020) mentioned as a didactic tool that help students to learn grammar, vocabulary and precise information, when the instruments were analyzed similar concepts and opinions were found when apprentices mentioned the significance these tools have had in their English learning process. To answer the research objective about the analysis of how the use of CANVA as an ICT tool impacts EFL students' writing skills in face-to-face and online sessions, positive comments were found for ICT and Canva concepts such as the easy access every person can have and overall, these resources let the flexibility and self-learning based on each apprentice's rhythm to learn, it shows an aligned pattern with constructivism because these methods of learning allow to develop a student-centered approach where they build their own knowledge by doing tasks by their own, where they make decisions on how they want to carry out this type of activities that Canva offer to do freely.

Research Implications

The research implications of this study can contribute to the educational field, in terms of reflecting the learners' perspective when using a platform that helps them to improve in their academic purposes to be able of communicating, not only to practice the writing of a second language but also in their professional fields when they want to show something in particular through words or phrases related to their training programs. Learners and teachers have the opportunity to explore a tool such as Canva, which is both useful and easy to navigate; however, its potential has not been sufficiently analyzed or put into practice, and many of its features remain unexplored. Also, the pedagogical mediation that is required by the students, it means they perceive the teacher or tutor as an important companion in their learning process as a guide

to confirm or correct their impressions either in face-to-face or in virtual classes, both modes agree with the teacher guidance to mediate.

Another implication this topic shows is related the benefit of doing a research based on an application (Canva) that has limited literature review. Lastly, one of the most notorious implications is regarding English for Specific Purposes (ESP), for learners that are training in specific technical or technological, because they can associate content with graphics which create a better understanding of a language, bearing in mind that ESP constitutes the core of the English competence offered by SENA in its syllabus for all apprentices, it is methodologically expected that this line of teaching will continue, alongside further studies on the relationship between Canva and ESP, as well as other resources that integrate new technological tools to enhance student motivation through diverse strategies in both learning modalities.

Research Limitation

One of the research limitations is concerning the sample, it was expected to have the same number of participants in the three training programs but it was not possible at all because the participants did not answer or could not participate because of their responsibilities or even the network conditions. Having into consideration that the three groups included people living in the countryside and there was prior knowledge from the lessons they had taken that this could occur, which resulted in a lack of diversity in terms of the population, however the collected answers were a good number to analyze the data it was expected to gather. In terms of methodological limitations, there was a clear one in relation to the research time, unfortunately this study took more time that initially set, which implied participants had a considerable period since the last time they used infographic to create writing content in English at this institution

(SENA), however the answers noticed they had some ideas, insights, remarks from the tasks they did in class.

Recommendations for Further Studies

There are some recommendations to recall regarding the topics developed in this research, for instance there are some studies that have worked in relation to the application Canva but in a general way, few studies are about infographics specifically, and knowing this didactic resource has had a huge used among several fields not only the educative one infographics are commonly used in news websites, broadcasts, newspapers, weather charts, traffic signs, tag clouds, and subway maps, Davidson (2014 cited in Alrwele, 2017), it needs better attention and more studies that show their effectiveness or the breakdown of its features. For addressing or managing the limitations that this research presented is to identify since the beginning the participants of the study and then give them an overlook of what is expected and to remind them of the importance of having contact and disposition at the moment of answering the instruments.

Another recommendation is to add new variables to analyze other aspects such as the creation of phrases, grammar errors found in infographics, creativity and how students combine these elements to learn a foreign language, it also can be joined a new instrument and it is document content analysis, where the content of the infographics is interpreted and compare with activities students do while being with face-to-face instruction or as an assignment to develop in virtual environments, a parallel between these two learning modalities, this as an assessment of the writing performance.

Conclusions

This research reflects positive perceptions that learners have when using the application Canva to create infographics and that let them to practice the writing skill in a foreign language, in this case English. Also, they consider this type of tasks are valid to have in different learning modalities but being the face-to-face the most remarkable, according to the results obtained in each instrument there were a vast preference to the face-to-face modality, this leads to answer one of the objective the research establishes about to examine students' preferences to learn writing through face-to-face or virtual instruction.

In terms of English for Specific Purposes (ESP), training programs view infographics as innovative resources that enable faster, easier, and more interactive learning of field-specific topics. Learners agreed that using this material to develop English writing skills was fundamental, as it allowed them to associate vocabulary with images and more easily infer relevant topics. One of the objectives sought to identify students' expectations regarding the use of Canva to create ESP infographics in both face-to-face and online sessions; overall, these expectations were affirmative, as learners acknowledged that infographics can effectively present topics, patterns, descriptions, and information related to a particular theme, hence this methodology to promote ESP with activities through interactive tools works as long as it is used with a specific intention.

In conclusion, the use of Canva and infographics was not identified as a strong factor in the development of writing skills when looking for literature review. Nevertheless, this study may encourage future research to further analyze these topics and explore additional features of the tool. Participants recognized that interactive resources allow them to practice and learn in ways different from traditional methods, such as transcription or workbook-based activities. The

findings also highlight the importance of integrating ICT tools into the classroom, as they support teacher mediation and contribute to the creation of dynamic, engaging, and relevant lessons, particularly in ESP contexts. However, it is essential to consider limitations related to internet access, as many students in Colombia lack reliable connectivity or access to computers, making this factor crucial for the implementation of virtual learning environments.

Finally, to answer the research question addressed in this study regarding students' perceptions of the use of the Canva application for creating infographics during the development of writing skills in face-to-face and online sessions, the findings indicate that participants expressed approving beliefs and perceptions toward Canva and infographic creation, with greater emphasis on the face-to-face learning modality and understanding on improvements in the development of writing skills.

Referencias Bibliográficas

- Aguirre, J., (2021). *Documentary Research: The Impact of ICT in EFL Education in Colombia*. Universidad Pedagógica Nacional. <http://hdl.handle.net/20.500.12209/16692>
- Alrwele, Noura Shabak. (2017). *Effects of Infographics on Student Achievement and Students' Perceptions of the Impacts of Infographics*. Journal of Education and Human Development September 2017, Vol. 6, No. 3. Texas: American Research Institute for Policy Development. Retrieved on July 21st, 2019 from http://jehdnet.com/journals/jehd/Vol_6_No_3_September_2017/12.pdf
- Ananga, P., Kofi, I., (2017). *Comparing Face-to-Face and Online Teaching and Learning in Higher Education*. MIER Journal of Educational Studies, Trends & Practices November 2017, Vol. 7, No. 2 (pp. 165 – 179). <https://doi.org/10.52634/mier/2017/v7/i2/1415>
- Brown, K & Hastings, W. (2006). *Encyclopedia of Language & Linguistics*. Latent Semantic Analysis, pp 706-709. https://books.google.com.co/books/about/Encyclopedia_of_Language_Linguistics.html?id=1D8OAQAAMAAJ&redir_esc=y
- Candra, R., Chandra, N., Hidayat, F. (2022). *The Use of Canva Application in Creative Writing Course: Students' Perceptions*. Published by Universitas PGRI Adi Buana Surabaya. <https://www.atlantis-pess.com/proceedings/icoelt-22/articles>
- Departamento Administrativo Nacional de Estadística, DANE. (2021). *Educación, Ciencia, Tecnología e Innovación ECTeI*. Reporte Estadístico N° 1. <https://www.dane.gov.co/files/investigaciones/boletines/educacion/ectei/documento-ECTeI-1-reporte-estadistico.pdf>

- Cope, B., & Kalantzis, M. (2015). *The things you do to know: An introduction to the pedagogy*. In B. Cope & M. Kalantzis (Eds.), *A Pedagogy of multiliteracies: Learning by design* (pp. 1-36). New York: Palgrave Macmillan. https://doi.org/10.1057/9781137539724_1
- Deslauriers, L., McCarty, L. S., Miller, K., Callaghan, K., and Kestin, G. (2019). *Measuring actual learning versus feeling of learning in response to being actively engaged in the classroom*. *Proc. Natl. Acad. Sci.* 116, 19251–19257. <https://doi.org/10.1073/pnas.1821936116>
- ElearningNC.gov. 2016. “*What Is eLearning?*” Accessed March 10. http://www.elearningnc.gov/about_elearning/what_is_elearning/.
- Escobar-Pérez, Jazmine & Martínez, A. (2008). *Validez de contenido y juicio de expertos: Una aproximación a su utilización*. *Avances en Medición*. 6. 27-36. https://www.researchgate.net/publication/302438451_Validez_de_contenido_y_juicio_de_expertos_Una_aproximacion_a_su_utilizacion
- Gilakjani, A., Mei Leong, L., & Nizam Ismail, H. (2013). Teachers’ use of technology and constructivism. *International Journal of Modern Education and Computer Science*, 5(4), 49–63. <https://doi.org/10.5815/ijmeecs.2013.04.07>
- Gillett, A., Hammond, A., & Martala, M. (2009). *Inside track to successful academic writing*. Pearson UK. <https://www.minams.edu.pk/cPanel/ebooks/miscellaneous/Successful%20Academic%20Writing%20-%20Andy%20Gillett.pdf>
- Göçen, G. (2019). *The Effect of Creative Writing Activities on Elementary School Students' Creative Writing Achievement, Writing Attitude and Motivation**. *Journal of Language and Linguistic Studies*, 15(3), 1032–1044. <https://doi.org/10.17263/jlls.631547>

Grainger, T., Goouch, K., & Lambirth, A. (2005). *Creativity and Writing: Developing Voice and Verve in the Classroom*. eBook Academic Collection (EBSCOhost).

https://api.pageplace.de/preview/DT0400.9781134332823_A24933946/preview-9781134332823_A24933946.pdf

Harmer, Jeremy (2004). *How to Teach Writing*. Longman: Pearson Education Ltd. <https://canada.net/wp-content/uploads/2022/07/How-to-Teach-Writing.pdf>

Hu, P.J., Chau, P.Y.K., Sheng, O.R.L., & Tam, K.Y. (1999). *Examining the technology acceptance model using physical acceptance of telemedicine technology*. Journal of Management Information Systems, 16(2), 91-112.

<https://doi.org/10.1080/07421222.1999.11518247>

Hyland, K. (2006). *English for Academic Purposes: An Advanced Resource Book*. Abingdon: Routledge.

https://bibcercador.uab.cat/permalink/34CSUC_UAB/1eqfv2p/alma991009991749706709

Arvaniti, E., Cope, B., Kalantzis, M., Stellakis, N. (2019). *Literacies. A pedagogy of differentiated planning and multimodal meanings*. Athens: Kritiki.

Kulzhova, Z. & Rodrigo, R. (2020). *Online VS Face-to-face learning Environments: A Comparison of Effectiveness in the Aspects of Writing Skill Acquisition and Student Satisfaction in Teaching Academic Writing Courses*.

https://www.researchgate.net/publication/350687431_Online_VS_Face-to-face_learning_Environments_A_Comparison_of_Effectiveness_in_the_Aspects_of_Writing_Skill_Acquisition_and_Student_Satisfaction_in_Teaching_Academic_Writing_Courses

- Larasati, M., Rustandi, & A. Friatin, L.Y. (2022). *Empowering student's creative writing ability by using Canva (case study research in one Junior High School in Ciamis)*. Journal of English Education Program (JEEP), 9(2), 1-11. [https://doi.org/10.25157/\(jeep\).v9i2.8548](https://doi.org/10.25157/(jeep).v9i2.8548)
- Mahdipour Saravani, Sina & Ghaffari, Sadaf & Luther, Yanye & Folkestad, James & Moraes, Marcia. (2022). *Automated Code Extraction from Discussion Board Text Dataset*. <https://doi.org/10.48550/arXiv.2210.17495>
- Masrom, M. (2007). *Technology Acceptance Model and E-learning*. Universiti Teknologi. https://www.researchgate.net/publication/228851659_Technology_acceptance_model_and_E-learning
- Montero, P. (2020). *Infographics as a didactic tool for teaching grammar and vocabulary at the Educational Institution José Aquilino Durán, in Cúcuta, Norte de Santander*. University of Pamplona. Faculty of Education. <http://repositoriodspace.unipamplona.edu.co/jspui/handle/20.500.12744/7087>
- Nguyen T, Netto CLM, Wilkins JF, Bröker P, Vargas EE, Sealfon CD, Puthipiroj P, Li KS, Bowler JE, Hinson HR, Pujar M and Stein GM (2021). *Insights Into Students' Experiences and Perceptions of Remote Learning Methods: From the COVID-19 Pandemic to Best Practice for the Future*. Front. Educ. <https://doi.org/10.3389/feduc.2021.647986>
- Negri, Armando. N.L. (1976). *The Colombian national apprenticeship service (SENA)*. [Prospects: quarterly review of education, VI, 2, p. 240-244](#)
- MinTic, (2023). *Cómo usar las TIC al servicio del campo*. <https://iniciacontic.gov.co/776/w3-article-280810.html>

- Plass, J., Moreno, R., & Brünken, R. (2010). *Cognitive Load Theory*. Cambridge University Press. eBook Academic Collection (EBSCOhost). <https://scispace.com/pdf/cognitive-load-theory-4512zlcqgh.pdf>
- Rahayu, P. (2021). *Challenges Faced by Teachers in Remote Area During Pandemic Covid-19*. *Advances in Social Science, Education and Humanities Research*, volume 538. <https://doi.org/10.2991/assehr.k.210322.073>
- Ramírez-Mera, U., Tur, G., Marin, V. (2022). *Personal Learning Environments in Online and Face-to-Face Contexts in Mexican Higher Education*. Published by De Gruyter. https://www.degruyterbrill.com/document/doi/10.1515/edu-2022-0009/html?utm_source=researchgate.net&utm_medium=article
- Ratheeswari, K. 2018. *Information Communication Technology in Education*. *Journal of Applied and Advanced Research*. <https://doi.org/10.21839/jaar.2018.v3iS1.169>
- Rezaei, Neda; Sayadian, Sima. (2015). *The Impact of Infographics on Iranian EFL Learners' Grammar Learning*. *Journal of Applied Linguistics and Language Research* Vol.2, Issue1. https://jallr.com/index.php/JALLR/article/viewFile/22/pdf_21
- Servicio Nacional de Aprendizaje SENA (n.d). *Bilingüismo*. <https://www.sena.edu.co/es-co/formacion/Paginas/bilinguismo.aspx>
- Servicio Nacional de Aprendizaje SENA (n.d). *History vision and mission SENA*. <https://www.sena.edu.co/en-us/Pages/sena.aspx>
- Skehan, P., & Foster, P. (1996). *A framework for the implementation of task-based instruction*. *Applied Linguistics*, 17(1), 38-62. <https://doi.org/10.1093/applin/17.1.38>

- Skinner, E., & Belmont M. (1993). *“Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year”*. Journal of educational psychology, 85, 4, 571. <https://psycnet.apa.org/doi/10.1037/0022-0663.85.4.571>
- Smaldino, S. E., Lowther, D. L., & Mims, C. (2015). *Instructional Technology and Media for Learning*. In NY: Pearson. <https://askereme1970.wordpress.com/wp-content/uploads/2018/07/instructional-technology-and-media-for-learning.pdf>
- Spencer, D., & Temple, T. (2021). *Examining students’ online course perceptions and comparing student performance outcomes in online and face-to-face classrooms*. Online Learning, 25(2), 233-261. <https://doi.org/10.24059/olj.v25i2.2227>
- Sweller, J., Chandler, P., Tierney, P., & Cooper, M. (1990). *Cognitive Load as a Factor in the Structuring of Technical Material*. Journal of Experimental Psychology: General, 119, 176–192. <https://doi.org/10.1037/0096-3445.119.2.176>
- Torres, J. and Argudo, A. (2024). *Exploring the Transformative Impact of ICT Integration in the EFL Classroom*. Revista Religación, Vol. 9 No 40. Universidad Católica de Cuenca. <https://doi.org/10.46652/rgn.v9i40.1172>
- Tsokolidou, R. (2012). *Space for two: Bilingualism and education issues*. Thessaloniki: Zigos.
- Vanegas, A. (2022). *Exploring the Effects of Using Authentic Materials to Foster the Comprehension of Writing Skills among EFL Students at a Public School*. Authentic Materials to Foster Writing Skills. Universidad de Antioquia. <https://hdl.handle.net/10495/30173>
- Walliman, N. (2011). *Research Methods: the basics*. London: Routledge http://uni.delf.pro/uploads/7/1/0/7/7107980/research_methods_the_basics.pdf

Yundayani, A. (2019). *Technological Pedagogical and Content Knowledge: Konsep Analisis Kebutuhan dalam Pengembangan Pembelajaran*. Prosiding Seminar Nasional Pendidikan STKIP Kusuma Negara, 1(1), 1–6.

<https://jurnal.stkipkusumanegara.ac.id/index.php/semnara2019/article/view/138>

Appendixes

Appendix A

Formats for the Consent Form and Validation Expert Instrument 1

Protocolo de Juicio de Expertos Consentimiento informado

En el marco de la investigación: “Percepciones sobre el uso de la aplicación CANVA en la creación de infografías durante el desarrollo de las habilidades de escritura en sesiones presenciales y online” la cuál es ejecutada con el objetivo de obtener el título de la Maestría en Mediación Pedagógica en el Aprendizaje del Inglés de la Universidad Nacional Abierta y a Distancia (UNAD). Yo Lisseth Tatiana Camacho, maestrante y autora de esta investigación asesorada por Juan Camilo Pérez, docente de la UNAD, solicita de su apoyo para realizar el siguiente cuestionario en línea, que busca conocer su percepción de un instrumento que tiene como objetivo reconocer las percepciones de los estudiantes al momento de utilizar la aplicación Canva, y específicamente durante la creación de infografías, para medir y analizar diferentes conceptos adheridos a la investigación, como el uso de las TIC, y de la habilidad de escritura, así como de percepciones generales que conciernen el estudio, los cuales son elementos investigativos esenciales para el análisis de los futuros resultados.

Usted fue elegido (a) en este estudio por tener conocimientos en el ámbito de la investigación, y podrá dar su opinión respecto al mismo, si desea acceder a participar de esta investigación le serán solicitados algunos datos de recolección con el propósito de tener constancia y evidencias del proceso de juicio de expertos que dan sustento teórico del instrumento.

A su vez, este proyecto se rige bajo el cumplimiento de la ley 1581 de 2012 que establece que se aplicará al tratamiento de datos personales efectuado en territorio colombiano o cuando al responsable del tratamiento o encargado del tratamiento no establecido en territorio nacional le sea aplicable la legislación colombiana en virtud de normas y tratados internacionales.

Con base en lo anterior confirmo participación en la investigación y doy fe que estoy participando de manera voluntaria, y que la información que aportare será de manera confidencial por lo que no será revelada a otras personas: Si _____ No _____

Si su respuesta es Sí, por favor continúe con las siguientes preguntas:

- Nombres y apellidos: _____
- Años de experiencia que ha tenido en su profesión: _____
- Donde trabaja actualmente: _____
- Áreas de experiencia a cargo durante su experiencia profesional:

- Correo electrónico: _____

Conceptualización:

Tecnología de la Información y la Comunicación (TIC)

Ratheeswari (2018) afirma que TIC tiene como significado “tecnología de la información y la comunicación”. Se refiere a tecnologías que brindan acceso a la información a través de las telecomunicaciones. Es similar a la Tecnología de la Información (TI), pero se centra principalmente en las tecnologías de la comunicación. Esto incluye internet, redes inalámbricas, teléfonos móviles y otros medios de comunicación. Sabiendo que la globalización ha traído progreso al ser humano, esta nueva fuente tecnológica vino como una ayuda en varios campos académicos y científicos, siendo el educativo uno de los más beneficiados porque ha sido un aliado a la hora de enseñar con nuevas herramientas metodológicas y pedagógicas.

Técnicamente, lo que permite estar actualizado con el mundo y al mismo tiempo innovar y competir con los nuevos estilos de aprendizaje que surgen constantemente.

Canva

Canva es un sitio web de herramientas de diseño gráfico que brinda acceso a más de un millón de fotografías, gráficos y fuentes en medios tecnológicos visuales que se pueden arrastrar y soltar (Yundayani, 2019). Canva ofrece una experiencia momentánea para que los estudiantes involucren su proceso creativo, permitiéndoles repetir el material recordando conocimientos

previos. Los medios visuales es un tipo de medio para la educación de idiomas aplicado como diagramas computacionales, imágenes de pizarras, fotografías, gráficos de libros y dibujos animados (Smaldino et al., 2015). Ahora bien, es significativo mencionar cómo funciona una aplicación específica en el aprendizaje de la Lengua Extranjera Inglesa principalmente en el desarrollo o mejoramiento de la habilidad de escritura, en este sentido se contextualiza a los siguientes autores por sus hallazgos sobre la relación de la escritura y la aplicación CANVA; Larasati et al. (2022) quienes concluyen que el 68% de los estudiantes están de acuerdo que la herramienta Canva ayuda a recordar mejor la información en comparación con los métodos tradicionales tales como la realización de tareas por medio de libros o cartillas de textos, permitiendo a los autores inferir que la mayoría de los estudiantes consideran que escribir en Canva es agradable y divertido.

Habilidad de Escritura

Existen cuatro habilidades para el aprendizaje de una lengua, estas son divididas entre habilidades receptivas y productivas. La escritura es una de las habilidades que debería ser dominada en la escuela/universidad o en cualquier otra parte donde sea necesaria. Escribir es un proceso complejo que requiere varias cualidades, sin embargo, la habilidad escritora se puede desarrollar siguiendo una serie de estrategias y practicando varios patrones propios. Harmer (2004) establece que la escritura es una forma de comunicación que emite pensamientos o expresa sentimientos a través de formas escritas. La importancia de esta habilidad dentro del contexto de este estudio recae en la necesidad de descubrir y reconocer su enseñanza y practica a través de nuevas estrategias que se están implementando en los ambientes de aprendizaje con la ayuda de herramientas interactivas.

Nombre del estudio:

Learners' perceptions using the application CANVA to create infographics when practicing the writing skill in face-to-face and online sessions.

Percepciones de los alumnos al utilizar la aplicación CANVA para crear infografías al practicar la habilidad de escritura en sesiones presenciales y en línea.

Objetivo del juicio de experto:

Conocer la opinión, juicio o valoración informada del experto con trayectoria del tema en relación al planteamiento del cuestionario.

Tipo de Instrumento:

Instrumento de recolección de información de las percepciones sobre el uso de la aplicación Canva en la creación de infografías, con preguntas cerradas de tipo Likert y abiertas.

Modo de Implementación:

Su realización será a través de la aplicación Google Forms.

Instrucciones de juicio de expertos

Por favor tenga en cuenta las siguientes indicaciones al momento de juzgar cada sección propuesta en el cuestionario.

Suficiencia: Los ítems que pertenecen a una misma dimensión bastan para obtener la medición de ésta.

Claridad: El ítem se comprende fácilmente, es decir, su sintáctica y semántica son adecuadas.

Coherencia: El ítem tiene relación lógica con la dimensión o indicador que está midiendo.

Relevancia: El ítem es esencial o importante, es decir debe ser incluido.

Calificación e indicador para evaluar el instrumento:

Se establece una calificación para analizar cada indicación/variable encontrada en el cuestionario a evaluar. Por favor siga los siguientes valores de acuerdo a su criterio como juez experto.

(Tomado de Escobar-Pérez & Martínez, 2008).

Categoría	Calificación	Indicador
<p>SUFICIENCIA:</p> <p>Los ítems que pertenecen a una misma dimensión</p>	<ol style="list-style-type: none"> 1. No cumple con el criterio 2. Bajo Nivel 3. Moderado nivel 4. Alto nivel 	<ul style="list-style-type: none"> - Los ítems no son suficientes para medir la dimensión. - Los ítems miden algún aspecto de la dimensión, pero no corresponden con la dimensión total.

<p>bastan para obtener la medición de ésta.</p>		<ul style="list-style-type: none"> - Se deben incrementar algunos ítems para poder evaluar la dimensión completamente. - Los ítems son suficientes.
<p>CLARIDAD:</p> <p>El ítem se comprende fácilmente, es decir, su sintáctica y semántica son adecuadas.</p>	<ol style="list-style-type: none"> 1. No cumple con el criterio 2. Bajo Nivel 3. Moderado nivel 4. Alto nivel 	<ul style="list-style-type: none"> - El ítem no es claro. - El ítem requiere bastantes modificaciones o una modificación muy grande en el uso de las palabras de acuerdo con su significado o por la ordenación de las mismas. - Se requiere una modificación muy específica de algunos de los términos del ítem. - El ítem es claro, tiene semántica y sintaxis adecuada.
<p>COHERENCIA:</p> <p>El ítem tiene relación lógica con la dimensión o indicador que está midiendo.</p>	<ol style="list-style-type: none"> 1. No cumple con el criterio 2. Bajo Nivel 3. Moderado nivel 4. Alto nivel 	<ul style="list-style-type: none"> - El ítem no tiene relación lógica con la dimensión. - El ítem tiene una relación tangencial con la dimensión. - El ítem tiene una relación moderada con la dimensión que está midiendo. - El ítem se encuentra completamente relacionado con la dimensión que está midiendo.
<p>RELEVANCIA:</p> <p>El ítem es esencial o importante, es decir debe ser incluido.</p>	<ol style="list-style-type: none"> 1. No cumple con el criterio 2. Bajo Nivel 3. Moderado nivel 4. Alto nivel 	<ul style="list-style-type: none"> - El ítem puede ser eliminado sin que se vea afectada la medición de la dimensión. - El ítem tiene alguna relevancia, pero otro ítem puede estar incluyendo lo que mide éste. - El ítem es relativamente importante. - El ítem es muy relevante y debe ser incluido.

Cuestionario

Cordial saludo,

De manera muy amable le solicito diligenciar el formato que ha sido diseñado para analizar y dar su opinión experta sobre un instrumento de investigación que pretende ser llevado a cabo en el estudio denominado: Percepciones de los alumnos al utilizar la aplicación CANVA para crear infografías al practicar la habilidad de escritura en inglés en sesiones presenciales y en línea, la población que participara en el estudio son aprendices de diferentes programas técnicos y de tecnología del SENA sede de la provincia de García Rovira en Santander, población que reside tanto en ciudad como en zona rural.

Objetivos del cuestionario:

- Reconocer las percepciones de los estudiantes sobre el uso de CANVA como estrategia de escritura durante sesiones presenciales y en línea.
- Analizar los diferentes componentes al utilizar habilidades de escritura de inglés como lengua extranjera para crear infografías, como el uso de herramientas TIC a través de dos modalidades de aprendizaje (sesiones presenciales y en línea).

Agradezco su oportuna respuesta, opinión experta y sinceridad que serán altamente valoradas, y que son de gran importancia para poder implementar un cuestionario que cumpla con las condiciones necesarias para ser llevado a cabo de manera correcta, y asertiva a la población participante.

Si por algún motivo surgen dudas o inquietudes respecto al contenido del cuestionario puede comunicarse de manera directa con el maestrante a cargo mediante el numero celular 3217582768, o a través del correo electrónico <mailto:lcamachob@unadvirtual.edu.co>

Desarrollo del Instrumento:

Enlace del cuestionario en línea:

<https://forms.gle/RLcFuJGmpumd5epj6>

La primera sección de la encuesta en línea (cuestionario) se centra en recopilar algunos datos básicos de información personal de la población que será intervenida durante la implementación

de la investigación, si considera que se pueden incluir más preguntas sociodemográficas que sean valiosas para el análisis, redáctelas en la sección de comentarios.

Información Sociodemográfica:

1.1 Nombre: _____

1.2 Edad:

- 15-25 años
- 26-35 años
- 36-45 años
- 46- 55 años
- Más de 56 años

1.3 Nivel de formación (técnico/tecnólogo): _____

1.4 Es aprendiz activo o egresado: _____

1.5 Programa al que pertenece o perteneció (SENA): _____

1.6 Vivienda (urbana/rural): _____

1.7 Cuenta con dispositivos tecnológicos y conectividad (si/no): ____

1.8 ¿Considera que el inglés es importante?

- Sí
- No

1.9 ¿Qué habilidad se le dificulta más?

- Lectura
- Escritura
- Habla
- Escucha

Comentarios de preguntas sociodemográficas:

A continuación, el aprendiz deberá leer cada categoría y responder según la escala de Likert que se presente, al final en algunas categorías encontrará una pregunta abierta para ser respondida según criterio propio.

Uso de Herramientas TIC

*Antes de continuar con esta sección, por favor responda si alguna vez ha hecho uso de las tecnologías para la información y comunicación, como por ejemplo el teléfono, el internet o plataformas digitales:

Si ___ No ___

Si la respuesta es sí, cuales de las siguientes tecnologías para la información y comunicación ha usado, puede seleccionar más de una opción:

- Internet
- Correo electrónico
- Computadores
- Redes sociales
- Teléfono
- Plataformas de videoconferencia/digitales
- Todas las anteriores
- Otra, ¿cuál? _____

2.1. En una escala del 1 al 5 donde 1 es "Totalmente en desacuerdo" y 5 es "Totalmente de acuerdo", ¿Qué tan de acuerdo está respecto a que las herramientas TIC (recursos y dispositivos que facilitan la comunicación, procesamiento y almacenamiento de información) son necesarias para el aprendizaje de un idioma extranjero el cual es uno de los conceptos esenciales en la realización de este estudio?

2.2. En una escala del 1 al 5 donde 1 es "Totalmente en desacuerdo" y 5 es "Totalmente de acuerdo", ¿Qué tan de acuerdo está en considerar que el uso de las tecnologías de la información y comunicación deberían ser usadas constantemente en diferentes actividades durante la clase de inglés, como por ejemplo en la realización de presentaciones, evaluaciones formativas o documentos?

2.3. Pregunta abierta:

Para reconocer su percepción sobre el uso de los recursos tecnológicos, específicamente la utilización de las TIC responda las siguientes preguntas, ¿Qué ventajas consideran que existen al utilizar herramientas TIC para aprender inglés?

Y ¿Qué desventajas consideran que existen al utilizar herramientas TIC para aprender inglés?

Sección	Ítem	Categoría			Observaciones
		Claridad	Coherencia	Relevancia	
Uso de Herramientas TIC	2.1				
	2.2				
	2.3				

Uso de la Habilidad de Escritura en inglés

3.1. En una escala del 1 al 5 donde 1 es "Nunca" y 5 es "Siempre", ¿Con qué frecuencia hace uso de las tecnologías de la información y comunicación (TIC) para realizar actividades de escritura en inglés, como ejercicios interactivos, infografías, blogs, entre otros?

3.2. En una escala del 1 al 5 donde 1 es "Nunca" y 5 es "Siempre", ¿Con qué frecuencia considera que puede practicar la habilidad de escritura en inglés con actividades en línea como por ejemplo la creación de infografías?

3.3. Para reconocer su percepción sobre el uso de la habilidad de la escritura en inglés de manera más precisa, responda los siguientes planteamientos:

¿Ha practicado la habilidad de escritura en la clase de inglés del SENA manera virtual?

- Si
- No

Si la respuesta es positiva, cuál de las siguientes actividades le ha llamado la atención:

- Composiciones escritas (historias)
- Blog o diario en línea

- Creación de correos electrónicos
- Elaboración de infografías
- Otra, ¿cuál? _____

¿Ha practicado la habilidad de escritura en la clase de inglés del SENA manera presencial?

- Si
- No

Si la respuesta es positiva, cuál de las siguientes actividades le ha llamado la atención:

- Creación de diálogos
- Cartas o mensajes
- Construcción de oraciones
- Elaboración de infografías
- Otra, ¿cuál? _____

Sección	Ítem	Categoría			Observaciones
		Claridad	Coherencia	Relevancia	
Uso de la Habilidad de Escritura en inglés	3.1				
	3.2				
	3.3				

Aplicación Canva y contenido sobre Infografías

¿Ha utilizado la aplicación CANVA en la clase de inglés VIRTUAL DEL SENA?

- Si
- No

4.1. En una escala del 1 al 5 donde 1 es " Muy en desacuerdo" y 5 es " Muy de acuerdo", ¿le pareció útil para desarrollar su habilidad escritora en inglés?

¿Ha utilizado la aplicación CANVA en la clase de inglés PRESENCIAL DEL SENA?

- Si
- No

4.2. En una escala del 1 al 5 donde 1 es "Muy en desacuerdo" y 5 es " Muy de acuerdo", ¿le pareció útil para desarrollar su habilidad escritora en inglés?

4.3. En una escala del 1 al 5 donde 1 es "Muy en desacuerdo" y 5 es " Muy de acuerdo", ¿Qué tan de acuerdo considera está practicando su habilidad de escritura en el idioma inglés cuando está agregando contenido a una infografía, como actividad de aprendizaje en esta lengua extranjera?

4.4 En una escala del 1 al 5 donde 1 es "Muy en desacuerdo" y 5 es " Muy de acuerdo", y según su nivel de mejora percibido usando Canva en aspectos concretos de la escritura como organización de ideas, vocabulario o coherencia, ¿ha notado progreso en su proceso de aprendizaje?

4.4.1. Pregunta abierta:

¿Qué cree que le aporta Canva a su proceso de aprendizaje de la escritura en inglés, de ejemplos por favor?

4.5. Pregunta abierta:

Uno de los principales recursos que ofrece la aplicación Canva es la creación de infografías, ellas son utilizadas para representar información compleja de forma clara y concisa, utilizando imágenes, gráficos y texto. Ahora, para reconocer su percepción de esta aplicación y este recurso:

Mencione la o las ventajas que considera puede tener como estudiante/aprendiz al momento de usar infografías para el aprendizaje de escritura en inglés.

Ahora mencione la o las desventajas que considera puede tener como estudiante/aprendiz al momento de usar infografías para el aprendizaje de escritura en inglés.

Sección	Ítem	Categoría			Observaciones
		Claridad	Coherencia	Relevancia	

Aplicación Canva y contenido sobre Infografías	4.1				
	4.2				
	4.3				
	4.4				
	4.4.1				
	4.5				

Modalidades de Aprendizaje

5.1. ¿Qué modalidad o modalidades de aprendizaje prefiere cuándo está aprendiendo o practicando la habilidad de escritura en inglés?

Opciones

- Presencial
- Virtual (con algunos encuentros presenciales)
- A distancia (sin ningún encuentro presencial)
- Híbrida/Combinada
- Otra, ¿cuál? _____

5.2. ¿En qué modalidad o modalidades de aprendizaje considera que puede aprovechar mejor el uso de recursos tecnológicos (herramientas digitales, plataformas de aprendizaje, redes de comunicación) para el aprendizaje del idioma inglés?

Opciones

- Presencial
- Virtual (con algunos encuentros presenciales)
- A distancia (sin ningún encuentro presencial)
- Híbrida/Combinada
- Otra, ¿cuál? _____

5.3. ¿Qué modalidad de aprendizaje siente que es más efectivo para practicar la habilidad de escritura en inglés según la experiencia que ha podido tener al momento de aprender esta lengua?

Opciones

- Presencial
- Virtual (con algunos encuentros presenciales)
- A distancia (sin ningún encuentro presencial)

- Híbrida/Combinada
- Otra, ¿cuál? _____
- ¿Por qué? _____

5.4. ¿En qué modalidad considera que el uso de Canva es más útil para practicar la escritura en inglés?

Opciones

- Presencial
- Virtual (con algunos encuentros presenciales)
- A distancia (sin ningún encuentro presencial)
- Híbrida/Combinada
- Otra, ¿cuál? _____
- ¿Por qué? _____

5.5. Pregunta abierta:

¿Cuál sería la diferencia de usar Canva para enseñar escritura en inglés en clases presenciales comparado con clases virtuales o a distancia, por favor describa las diferencias que ha notado o que imagina que existen?

Sección	Ítem	Categoría			Observaciones
		Claridad	Coherencia	Relevancia	
Modalidades de Aprendizaje	5.1				
	5.2				
	5.3				
	5.4				
	5.5				

Percepciones Generales

6.1. En una escala del 1 al 5 donde 1 es "Poco relevante" y 5 es "Extremadamente relevante":
 ¿Qué tan relevante considera el impacto que las tecnologías de la información y comunicación han traído al momento de aprender un tema en particular de manera virtual, con recursos interactivos y en línea diseñados para lograr el desarrollo de la habilidad escritora en el inglés?

6.2. ¿Qué tan relevante considera el impacto que las tecnologías de la información y comunicación han traído al momento de aprender un tema en particular de manera presencial, con recursos interactivos y en línea diseñados para lograr tal finalidad?

6.3. En una escala del 1 al 5 donde 1 es "Poco relevante" y 5 es "Extremadamente relevante", ¿Qué importancia tiene para usted crear infografías en inglés usando las TICs para el aprendizaje de la lengua inglesa?

6.4. Pregunta abierta:

¿Qué experiencias desea compartir sobre el uso de Canva para crear infografías en inglés, luego de reflexionar sobre los temas tratados en este cuestionario?

Sección	Ítem	Categoría			Observaciones
		Claridad	Coherencia	Relevancia	
Percepciones Generales	6.1				
	6.2				
	6.3				
	6.4				

Ahora vamos a evaluar la suficiencia. En una escala de 1 a 4 dónde 1 es no cumple, 2 es cumple con bajo nivel, 3 es cumple con moderado nivel y 4 es cumple con alto nivel, ¿todas las preguntas creadas son **suficientes** para cumplir con los objetivos de este cuestionario? Seleccione solo un valor de 1 a 4.

Appendix B

Format for the Validation Expert Instrument 2

Entrevista

Cordial saludo, de manera muy amable le solicito diligenciar el formato que ha sido diseñado para analizar y dar su opinión experta sobre un instrumento de investigación que pretende ser llevado a cabo en el estudio denominado: Percepciones de los alumnos al utilizar la aplicación CANVA para crear infografías al practicar la habilidad de escritura en sesiones presenciales y en línea, la población que participará en el estudio son aprendices de programas técnicos y de tecnología del SENA sede de la provincia de García Rovira en Santander, población que reside tanto en ciudad como en zona rural.

Objetivo de la entrevista:

Explorar las percepciones de los estudiantes sobre la mediación pedagógica, el uso de herramientas digitales y el desarrollo de la escritura en inglés para su disciplina.

Agradezco su oportuna respuesta, opinión experta y sinceridad que serán altamente valoradas, y que son de gran importancia para poder implementar una entrevista que cumpla con las condiciones necesarias para ser llevada a cabo de manera correcta, y asertiva a la población participante. Si por algún motivo surgen dudas o inquietudes respecto al contenido del cuestionario puede comunicarse de manera directa con el maestrante a cargo mediante el numero celular 3217582768, o a través del correo electrónico <mailto:lcamachob@unadvirtual.edu.co>

Desarrollo del Instrumento:

El aprendiz empezara presentándose y mencionando el programa de formación al que perteneció. Luego de esto se darán las pautas para su realización, y posteriormente se mencionarán las preguntas de manera individual.

Instrucciones para el entrevistado:

- Por favor, responda con sinceridad según su experiencia general.
- No es necesario recordar todos los detalles de actividades pasadas.

- Puede escribir sus respuestas o dictarlas durante la entrevista grabada.

Preguntas de la entrevista:

1. En general, ¿qué tipo de apoyo o guía del docente considera más útil para mejorar su escritura en inglés?
2. ¿Cree que el uso de herramientas digitales (como Canva) ayuda en la escritura de inglés? ¿Por qué o por qué no?
3. ¿Qué tipo de actividades o estrategias del docente le ayudan a organizar sus ideas y escribir mejor en inglés?
4. En su experiencia, ¿cómo actividades con apoyo del docente y herramientas digitales le ayudaron a expresar conceptos de su disciplina (programa de formación) en inglés?
5. ¿Qué funciones del lenguaje (describir un proceso, dar recomendaciones, dar instrucciones) cree que mejoró al realizar estas actividades?
6. ¿Qué parte de la guía del docente o de las actividades fue más útil para completar sus tareas de escritura?
7. ¿Qué dificultades recuerda o percibe que tuvo al realizar actividades de escritura con apoyo del docente y herramientas digitales?
8. Comparando su aprendizaje actual con el de antes de estas actividades, ¿qué mejoras nota en su habilidad para escribir en inglés?
9. Si tuviera que recibir orientación para tareas de escritura en inglés hoy, ¿qué tipo de guía o estrategias le parecerían más efectivas?
10. En general, ¿qué aprendió sobre la escritura en inglés para su disciplina (programa de formación) gracias a estas actividades?
11. ¿Qué sugerencias tiene para mejorar actividades similares de escritura en inglés en el futuro?

Ítem/ Pregunta	Categoría			Observaciones
	Claridad	Coherencia	Relevancia	
1.				
2.				

3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				

Ahora vamos a evaluar la suficiencia. En una escala de 1 a 4 dónde 1 es no cumple, 2 es cumple con bajo nivel, 3 es cumple con moderado nivel y 4 es cumple con alto nivel, ¿todas las preguntas creadas son **suficientes** para cumplir con los objetivos de esta entrevista? Seleccione solo un valor de 1 a 4.