The Influence of ICT in the Development of Writing Skills through an Online Platform[1]

La influencia de las TIC en el desarrollo de las habilidades de escritura a través de una plataforma en línea

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Abstract

The purpose of this research was to determine the extent to which the support of an online educational platform benefited students' writing skill while carrying out the writing process wheel. The project involved a diagnostic stage carried out for one month, six workshops combining the WPW[2] and a commercial educational platform to improve the writing skill, and an evaluation stage within an Action Research cycle in a pre-intermediate EFL[3] course at Universidad Tecnológica de Pereira. The findings report the usefulness of ICT[4] in the EFL classroom as a means of improving students' writing performance, vocabulary, attitudes, and confidence and so improving their language performance.

Key words: *information and communication technologies (ICT), writing process wheel (WPW), confidence, performance*

Resumen

El objetivo de esta investigación fue determinar el grado en el cual el apoyo de una plataforma en línea educativa benefició la habilidad de escritura en los estudiantes mientras seguían el proceso de escritura en círculo. El proyecto implicó una etapa diagnóstica llevada a cabo durante un mes, seis talleres combinando el proceso de escritura en círculo y

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una plataforma comercial educativa para mejorar la habilidad de escritura y una etapa de evaluación dentro de un ciclo de investigación acción en un curso preintermedio de inglés en la Universidad Tecnológica de Pereira. Las conclusiones reportan la utilidad de las TIC[5] en el aula EFL como un medio para mejorar la escritura de los estudiantes, su vocabulario, sus actitudes y su confianza para mejorar su desempeño en la lengua.

Palabras clave: *tecnologías de la información y comunicación, proceso de escritura en círculo, confianza, desempeño*

This paper about the influence of an online platform on writing skill reports on a study carried out in an English course at a foreign languages institute at a public university in Pereira-Risaralda. The participants were selected according to convenience sampling. In order to identify the difficulties in the language setting, a diagnostic stage was carried out in which four data collection instruments were used, namely, a diary, an observation chart, a survey, and a questionnaire. The data were analyzed by using codes, groupings, and categories. The information gathered revealed some problems related to the writing skill.

Among the most relevant problematic areas identified in the diagnostic stage, the following can be mentioned: negative and positive perceptions towards writing, lack of lexis in the L2, lack of writing skills, and lack of exposure to the writing skill. As a matter of fact, the negative perceptions towards writing revealed students' feelings of frustration, anxiety, stress, and lack of self-confidence. Accordingly, the present study revealed the necessity for the implementation of strategies concerning the writing ability in the EFL context. I intend to show readers a research project involving ICT as a means of instruction in the EFL scenario to enhance language skills, namely, writing. The rationale for the project lies in how significant it might be to conduct English classes using ICT to develop students' writing fluency under the paradigm of action research method in the framework of a qualitative study; concerning language, the writing process wheel proposed by Harmer (2011) was the approach in this research proposal. The research question that guided this study was:

To what extend can computer-assisted language learning (CALL) influence the writing skill of A2 learners at a public university?

Theoretical Framework

Nowadays, Information and Communication Technologies appear as a strategy to improve learners' difficulties in order to provide students' growth in the writing skill. In the same fashion, Chang, Chang, Chen & Liou; Fidaoui, Bahous & Bacha; Goldberg, Russell & Cook; Liou, and Shang (cited in Liu, 2013) agree that "the use of technology has also long been introduced to complement traditional writing classes" (p. 302).

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[5] Tecnologías de la información y la comunicación

How to regard writing?

Being able to write and read is the ability people associate with literacy. According to Hyland (quoted in Harmer, 2011), people used to see someone as literate if they could manipulate "a set of discrete, value-free technical skills which included decoding and encoding meanings, manipulating writing tools, perceiving shape-sound correspondences, etc. which are acquired through formal education" (p. 323). A person without the skill to write is disqualified in a wide range of social roles (Tribble, 1996). In the past, the lack of this literacy deprived people to achieve personal and professional goals. Nowadays, people live in a globalized world where being competent is a key factor in order to accomplish one's objectives.

The term writing is defined in several ways; for example, Quintero (2008) states that "it is a sublime moment when words come into our minds and we struggle to connect and put them together to give meaning to the thousands of ideas that are running into our heads" (p. 10). On the other hand, Mitchell (cited in Quintero, 2008) claims that "it is a process of discovering and creating meaning" (p. 39). When writing, a series of processes such as thinking about what to say, how to say it, and how to write, makes students think critically about the process of writing taking into account grammar, vocabulary, coherence, among others aspects gained after language exposure. In the same fashion, Quintero (2008) points out that teachers and students acknowledge the importance of having good writing skills.

Writing as a process

The process of teaching writing can be measured as a writing process. It plays an important role in the main objective of the task and the final outcome, and it is more focused on the creation of meaning. Nowadays, many English teachers plan their classes following a process approach; this pays attention to the various stages that any piece of writing goes through (Harmer, 2011). Similarly, it requires the teachers and learners to follow a series of steps that the author names as Planning, Drafting, Editing and Final version, as represented in figure 1:

Figure 1. The Process Wheel. Writing process cycle developed in this action research. Taken from "The Practice of English Language Teaching" by Harmer, 2011, p. 326. Copyright 2011 by Pearson, Longman.

According to the writing process wheel, students plan their ideas as the first step in the writing wheel moving forward around the circumference. From each of these stages, the learners have the opportunity to:

> (**a**) Check language use (grammar, vocabulary, linkers) (**b**) check punctuation and layout (**c**) check spelling (**d**) check writing for unnecessary repetition of words and/or information (**e**) decide on the information for each paragraph and the order the paragraphs they should be in (**f**) note down various ideas (**g**) select the best ideas for inclusion (**h**) write a clean copy of the corrected version (**i**) write out a rough version (Harmer, 2011, p. 326).

Additionally, the writing process wheel permits learners to review material backwards and forwards among the stages to produce a good piece of work (Tribble, 1996). Correspondingly, White and Arndt (cited in Harmer, 2011) affirm that "writing is re-writing... re-vision seeing with new eyes" (p. 326). Similarly, the writing process wheel allows learners to move around the circumference to consider at the first or last stage any improvement in their written productions.

The main purpose of the writing process approach is to let students put into practice a good written production bearing in mind the writing process wheel. Consequently, Barnett (1992) points out that "looking at writing as a process also implies understanding writing as a series of drafts and considering the endeavor of writing, that is: prewriting, writing, and rewriting" (p. 18). However, it is necessary to think how we can encourage our students to

write, particularly, using writing strategies in which different kinds of paragraphs can be used such as the ones displayed in figure 2:
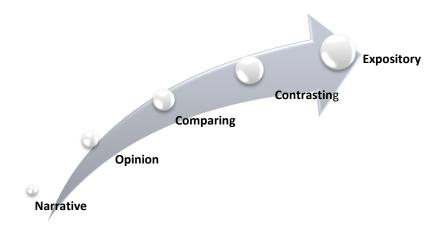

Figure 2. Writing Strategies. Classification of paragraphs developed in this action research.

Each of these paragraphs enhance students' writing ability by being able to describe an issue narrating a person's life, giving an opinion about current situations and trends in the world, comparing and contrasting facts that imply the analysis of reality, explaining in detail a preference through main and supporting ideas to defend one's views of the world. All of these kinds of paragraphs determine students' correct use of lexis, grammar, and content permitting them to gain motivation, self-confidence and building their writing habit in English. Going back to figure 1 about the writing process wheel, the role of each stage is presented in the following sections.

Planning. This stage deals with the use of key words and vocabulary to start writing. According to Harmer (2004), before starting to write or type, participants try and decide what information will be discussed. Particularly, *"for some participants this may involve detailed information, for others a few jotted words may be enough"* (Harmer, 2004, p. 4). Consequently, when planning, the writer has to think about the purpose of the writing, the audience and the content structure. These three main components will drive the planning to write the drafting stage.

Drafting. "We can refer to the first version of a piece of writing as a draft" (Harmer, 2004, p. 5). The drafting stage connects the ideas from the planning in a whole; particularly, it is the action where the participants convince and show their ability to join words coherently. At this stage, they are able to recycle vocabulary, to use as many resources as they want to enrich their paragraphs, thus enhancing their writing fluency.

Editing. It refers to the process of revision made by the students after receiving feedback from the teacher. The stage of editing implies that the text will be amended as many times as possible in order to produce the final version. According to Harmer (2004) "once writters have produced a draft, they then usually read through what they have written to see where it works and where it doesn't" (p. 5).

Final version. It deals with the last version students come up with after following teachers' feedback. At this stage, it is expected that students produce a good written production taking into consideration grammar, content, and vocabulary. Harmer (2004) says that "once writers have edited their draft, making the changes they consider to be necessary, they produce their final version" (p. 5).

Students' role inside an ICT-supported writing process model

Ministerio de Educación Nacional in Colombia has undertaken several projects concerning the issue of ICT in the classroom aiming to bring technology to every Colombian place by improving the educational process, reducing dropouts, and increasing academic achievement, thus training teachers and citizens in the use of ICT (Ministerio de Educación Nacional, 2012) providing students oportunities to interact with technological sources. For example, Rojas (2011) declares that students improved the writing skill, because "they consider it could be learned by taking advantage of technological resources such as computers, blogs and web pages" (p. 13). The outcomes reported that students feel they had developed writing more than the other language skills because they had been in touch with English through readings, guides, texts, among other items.

Under the approach of ICT, the introduction of tools in the educational system aims to bring new experiencies that promote language learning and interaction in the 21st century; that is why El Ministerio de Educación Nacional in Colombia has designed several tools to enhance students' learning. Consequently, the role of the students within the learning of English process is affected because of circumstances that permit them to create a desire to learn "perhaps the learners love the subject they have chosen, or maybe they are simply interested in seeing what it is like" (Harmer, 2009, p. 20).

Callister and Burbules (cited in Diaz & Jansson, 2011) agree that new technologies not only constitute a set of tools for the service of teaching and learning activities, but they make up an environment, a space, a cyberspace, in which human interactions take place (p. 10, translated). Additionally, computer language teaching programs offer the opportunity to study texts, perform grammar and vocabulary and motivate learners to use the language by interacting in a different scenario. For instance, Diaz and Jansson (2011) point out that in Chile the technological means have been an extraordinary advance in the teaching and learning of languages, particularly with the use of texts accompanied by CD ROM where images, videos, lexicons, information and programs are stored in order to perform all kinds of exercises (p. 10, translated). Thus, students have progressed in each of the skills permitting them to express freely using the vocabulary exposed.

On the other hand, affective factors are those feelings characterized by a large portion of emotional involvement such as *self-confidence*. As stated by Brown (2000) "self-confidence refers to learners' beliefs that they are indeed capable of accomplishing a task"; he suggests teachers should "sustain self-confidence where it already exists and to build where it doesn't" (p. 62). Further, Hayes (pointed out in Cushing, 2002) says that:

> Motivation and affect play a relevant role at the moment of writing. That is, "a writer's goals, predispositions, beliefs, and attitudes, and cost benefit influence the way a writer goes about the task of writing and the effort that will be put" (p. 25).

How to conceive ICT?

The ICT have gained more significance in the last two decades. This predominance has evolved in such a manner that they have become an indispensable tool in our daily life, for instance, in our educational environment. On the one hand, according to UNESCO (as cited in García & Marin, 2013):

> The term ICT is plural referring to a great many technologies and it is an all-encompassing term that includes the full gamut of electronic tools by means of which we gather, record and store information, and we exchange and distribute information to others (p. 428).

ICT became a priority for educational policies, teaching and learning a foreign language has become an issue of importance in our country. Hence, different efforts have been made with the purpose of keeping up with these current challenges and responding to the actual needs of the inhabitants.

El Ministerio de Educación Nacional in Colombia (2013) says that TIC (Spanish acronym for ICT) is the abbreviation of *Information and Communication Technologies* defined as "the set of resources, tools, equipment's, IT programs, applications, networks, that allow the compilation, processing, storage, transmission of information as voice, information, text, video and images" (p. 8, translated). The use of these gadgets might enrich the practices in the EFL context by providing meaningful and interesting input to support language learning. Haddad and Draxler (2002) say that "different ICTs have the potential to contribute to different facets of educational development and effective learning: expanding access, promoting efficiency, improving the quality of learning, enhancing the quality of teaching, and improving management systems" (p. 9).

In this way, computer-assisted language teaching and learning enhances teachers' practices and students' independence, participation, and motivation towards language learning, that is, it plays an important role in the learning setting.

El Ministerio de Educación Nacional in Colombia (2013) argues that the use of technology in the classroom can contribute to learning in several ways; for example:

> (a) to enrich learners' environment using material that calls their interest, (b) to grant major freedom to explore, analyze and build their knowledge, (c) to stimulate their imagination, creativity and critical thinking, (d) to offer updated and proper information, (e) to facilitate a scientific comprehension of the social and natural phenomena, and (f) to enable multisensory learning experiences. (p. 19, translated).

In that sense, facilitators can contribute to teaching and learning by using computers in the classroom in the development of the writing skill. Further, the use of the computer in EFL scenarios has had a great importance for teaching, learning, practicing, and testing purposes among ELT (English Language Teaching) researchers and pedagogues according to Alsied and Pathan (2013).

El Ministerio de Educación Nacional in Colombia (2013) explains that it is necessary to have better educational virtual contents in order to strengthen the processes of training in the use of new technologies since it is an essential element in the process of teachers' training towards language innovation along with the learning of a foreign language, so that people can face the challenges of the 21st century (p. 15). Additionally, the International Society for Technology in Education (ISTE) (quoted in Ministerio de Educación Nacional, 2013) claims that "the effective use of technology is paramount for teaching and learning in this digital era" (p. 22, translated).

There are a number of reasons for using the computer in the classroom; for instance, testing, working with multimedia content, using authentic material, etc. These advantages might empower teachers' teaching strategies and motivate students towards the language learning itself. The use of the computer in the classroom offers the opportunity for teachers and learners to interact in a meaningful and interesting way, taking into account that "the net generation, today's 'digital natives,' are 'bathed in bits' from birth, clutching remote controls, computer mice, and cell phones from an early age" (Trilling & Fadel, 2009, p. 69).

Nowadays, computer technology brings a set of advantages to promote and enhance languages skills. For example, it permits learners to develop their language competences by interacting with authentic material in an interesting and meaningful way. Additionally, it is one of the most effective tools to teach writing. For instance, Cunningham (2000) indicated that his students deemed the writing class more productive when they used word processing software, thus 88% of his students asserted that they had improved their writing skill and were more aware on the aspects of grammar, vocabulary and the language structures. Correspondingly, Kasper (stated in Alsied & Pathan, 2013) revealed similar results which highlight the usefulness of the computer towards writing development. Furthermore, studies drawn from Van Leeuwen and Gabriel (as cited in Sandolo, 2010) indicate that

"attitudes toward the writing they did in their classroom were positive; they were enthusiastic writers both on and off the computer" (p. 423).

Today, as mentioned in Álvarez (2012) "with advances in information and communication technologies (ICT), and the constant development of interactive and multimedia dynamics on websites and e-learning platforms, new alternatives can be used to overcome students' reading and writing problems" (p. 185). The use and potential of blogs, for example, has spread to the university context, including subjects and courses that specifically focus on reading and writing skills. Therefore, it is important to introduce the notion of writing through a platform.

Writing in platform

Allowing students to move away from a paper and pencil towards the use of ICT gives new possibilities of interaction and learning since it modifies traditional ways of communication opening better relationships between teachers and students, mainly because students are more skilled at technology. Hence, it is necessary to take advantage of promoting activities or tasks where students feel comfortable by using tools they know well. Also, it increases students' current knowledge, expanding their vocabulary and grammar patterns and permitting them to move at their own pace.

In this action research project, the use of a platform worked as a main vehicle for language instruction in order to enhance writing skills by being able to write different kinds of paragraphs helping students to have fewer mistakes concerning the aspects of spelling, tenses, word order, word choice, verb agreement, coherence, organization, among others.

Specifically, the platform used in this research was *Quia,* which is an online educational platform that offers the possibility to design language lessons in an interesting manner where the facilitator can use diverse tools such as challenge board, cloze, columns, hangman, pop-ups, matching, word search, columns, rags to riches, jumbled words, picture perfect, ordered list, and patterns.

In this project, all of the previous tools were used along the implementation process, enhancing students' writing skills by interacting with each skill. For instance, students were advised to do the activities as they were presented, since each exercise was designed with the main purpose of helping students to gain lexis, grammar and content to develop the planning, drafting, editing and final version. First, some examples were shown as models for students' final outcomes. Second, students interacted with the tools in order to expose them to the topic and grammar. Thirdly, they moved into the writing process wheel to produce their final product.

Each workshop was designed with the objective of helping students to write different kinds of paragraphs by comparing and contrasting ideas, providing opinion, retelling information, and describing experiences. Each of the mentioned strategies under

the use of *Quia* assisted learners to write while interacting with its tools. For instance, the writing process wheel in each of the workshops permitted students to move step by step to produce a neat and clear piece of work. Each workshop gave students different opportunities to work on grammatical components using the platform and the writing process wheel.

The following figures are some of the exercises used during the research project. Figure 3 provides students information about important sportsmen in the world; they needed to read and guess who the person was, while enhancing the use of the past simple tense. Additionally, it represents a model for student to produce in their final written production. Figure 4 gives students the chance to play by recalling previous information in order to compare and contrast ideas.
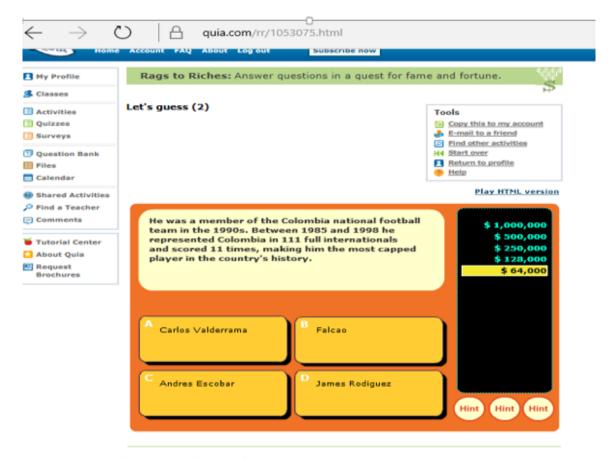

Figure 3. Rags to Riches. Reviewing past simple through famous sportsmen.
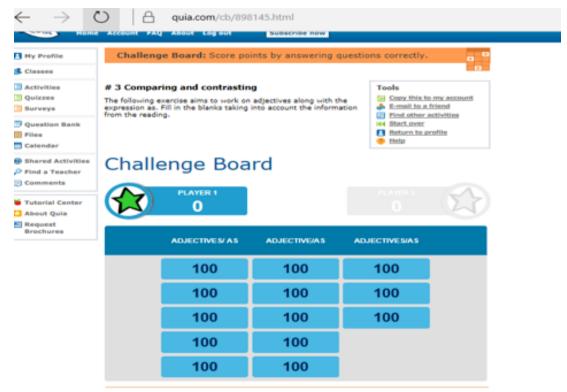
Figure 4. Challenge Board. Comparing and contrasting.

Assessing the writing skill

What does it mean to test writing ability? According to Hughes (pointed out in Cushing, 2002) "the best way to test people's writing ability is to get them to write" (p. 1). Nonetheless, designing a good test of writing contemplates a number of key questions that will let the participants and the teachers know the usefulness of the task.

Principally, when designing a writing test, the first step to consider is what we plan to test for. Similarly, Bachman and Palmer (cited in Cushing, 2002) point out that "when testing in writing the primary purpose is to make inferences about language ability and the second purpose is to make decisions based on those inferences" (p. 40). "It is virtually impossible to comment on what is right or wrong in what a learner has done without conveying some kind of assessment" (Ur, 2003, p. 242). According to Johnson and Johnson (2002) "assessment involves collecting information about the quality or quantity of a change in a student, group, class, school, teacher, or administrator" (p. 2). In the same fashion, Ur (2003) claims that "most of the feedback we give our learners is ongoing correction and assessment with the aim of bringing improvement" (p. 244). In this sense, the role of assessment and correction aims to gather evidence about learners' progress in order to provide some perfection. Jones (2005) says that "assessment for learning is all about informing learners of their progress to empower them to take the necessary action to improve their performance" (p. 5).

Methodology

The type of study in this research was under the paradigm of qualitative research which is a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem (Creswell, 2008); that is to say, qualitative research is more aligned to people's behaviors. Along with this, this study employed the action research model which aimed to develop the writing competence in the English language. Accordingly, this study passed through phases such as planning, action, reflection and observation as stated by McTaggart (as discussed in Burns, 2010).

In terms of planning, a set of lesson plans were designed in order to help students to progress in the English language considering the linguistic, pragmatic and sociolinguistic competence, specifically considering the writing skill; each of these lessons focused on enriching students' repertoire and progress in the writing skill; as stated by White and Arndt (1996) "writing is far from being a simple matter of transcribing language into written symbols, it demands conscious intellectual effort, which usually has to be sustained over a considerable period of time" (p. 3).

In accordance with the Action Research model, the reflection stage in each lesson concentrated on the issues of analyzing and writing down the behaviors of the participants that occurred in the learning scenario concerning their writing skill. The instruments designed in order to gather the information during this research were the following: a questionnaire, diaries, observations, lesson reports, and surveys. Consistent with Creswell (2008), the researcher collected the raw data results from three different instruments: the diary, the observation and the questionnaire. Firstly, a questionnaire was given to the students in order to identify their perceptions towards the writing skill considering their experience, interests, aptitudes, and feelings. Secondly, a diary was kept by the teacher to write down those events that occurred in the lesson while under the use of ICT and writing. Thirdly, a non-participant observer was invited to the classes to analyze language behaviors while using the online commercial platform while writing. Additionally, a lesson report was carried out taking into consideration the results of the main task of the lesson in relation to the number of students who completed the exercise and the kind of problems in their written production. Finally, learners were assigned to complete a Likert scale questionnaire about the lesson, mainly about writing in platform. Table 1 summarizes the data collection instruments used in both the diagnostic and the action stages of this research project:

Table 1

Data collection technique

Data collection Technique	Data collection instrument	Rationale
Diagnostic stage	Likert Questionnaire	This instrument was completed to know students' experience in the writing skill; precisely, language exposure, feelings, and feedback.
	Survey	To explore students' interests and wants using Information Communication Technologies (ICT) to develop their writing fluency.
	Observation	To collect students' behaviors when writing using the computer; specifically, the practice of online dictionaries, the use of the right button, the speed at the keyboard, use of L1, among other aspects.
	Diary	To mirror language behaviors taken place in the learning scenario; that is, students' attitudes working with the computer and their reactions towards the activities along with teacher's impressions of why certain attitudes happened.
Action stage	Likert questionnaire	To see students' perceptions towards the class using the Quia platform and the process writing wheel; namely, planning, drafting, editing, and final version.
	Lesson report	To analyze students' written performance by means of the writing rubric from the institution; specifically, spelling, word order, word choice, missing subjects, meaning, along with the rubric proposed by Hughey et al. (1981); for example, content, vocabulary, organization, and mechanics.
	Observation	To examine students' attitudes when working on the Quia platform and its tools such as hangman, challenge board, survey, and quiz to develop the tasks using the writing process wheel.
	Diary	To gather teacher's insights about the lesson taking into account the strategy used, students' attitudes working on Quia and the actions taken place at the writing process wheel.

Note: Data collection instruments in diagnostics and action stage.

At the diagnostic stage and the initial cycle of the implementation, a ground approach (Freeman, 1998) was adopted for data analysis in which the codes or categories were named according to what they represented. For the last seven cycles corresponding to workshops 2 through 7, data were analyzed on the basis of the a priori approach also suggested by Freeman (1998) according to which the already established categories of analysis were maintained in the data analysis procedures. Accordingly, a triangulation was carried out in order to confirm validity and reliability among the instruments and the three sources of information, in this particular study, the researcher's view, the observer's view and the students' view. In summary, the data analysis consisted of the following: Firstly, the information was encoded. Secondly, it was categorized mainly by identifying similarities. Later, the number of frequencies was counted in each of the instruments. Then,

they were organized in a chart identifying the codes, the operationalization, and the occurrences in the diary, the observation, the questionnaire and the lesson report along with the percentages. Finally, an interpretation was given.

Participants

This study was carried out in a regular English course at the Institute of Foreign Languages (ILEX) at Universidad Tecnológica de Pereira. This course had 12 students whose ages ranged between 17 and 25 years old; there were seven men and five women. These learners belonged to different programs at the university, namely, Recreation and Sport Sciences, Sustainable Tourism, Children Pedagogy, Industrial Engineering and Music. These learners came from different social strata; specifically, strata 2 and 3 and lived in the city of Pereira and surrounding towns. They were initially assigned to the course by the university Registrar Office according to their request for preparation in EFL.

Research stages / Phases of the study

The current situation of EFL in Risaralda is made evident in the project called *The State of the Art of the English Language Teaching in Public High Schools in Risaralda* whose main focus was to declare the relevant aspects of the English language subject in terms of language use, procedures and perceptions. The goal of this research was, then, to describe and interpret the participants' perceptions around English language teaching and learning as well as the tendencies in instruction and the role of the foreign language and the mother tongue in the classroom. Consequently, it is relevant to mention that this study was part of a project that belongs to an educational public policy called *Proyecto de bilingüismo: intervención colegios alma mater*, implemented by the Ministerio de Educación Nacional in Risaralda in 2011, whose aim was to increase and promote the learning of English in the Department in order to have citizens competent in the language. This study intended to respond to the first stage of the Risaralda bilingual project which attempts to represent and describe the realities of the English teaching in public institutions, with the purpose of establishing a reference that will contribute to the development of the next phases of the project Risaralda Bilingüe. Precisely, this study carried out in Santa Rosa de Cabal in 2012 by López and González revealed how English language teachers were conducting their classes considering the aspects of classroom management, use of L1 and L2, lack of ICT, and lesson planning; the conclusions from this study led to the proposal of the present study to focus on the implementation of ICT in the development of the English language, specifically the writing skill.

Diagnostic stage. In order to explore and identify the problems students were having in the English learning setting, a set of data collection research procedures were carried out; first, students were asked to complete a Likert scale questionnaire in a survey that included open-ended questions. Second, an observation was carried out by an outsider in order to perceive students' reactions towards the exercises about their strengths and weaknesses in their language performance. Finally, a diary was completed and aimed to recall the main

aspects of the lesson bearing in mind students' reactions and behaviors concerning their performance.

On the one hand, the students, the observer and the teacher agreed on the fact that there were two kinds of perceptions towards writing that illustrate two language views. Firstly, the information collected displayed *negative perceptions towards writing* because of lack of practice, lack of feedback, frustration and insecurity. Second, the category *positive perceptions towards writing* indicated that students liked English and they expected to be exposed to this skill with more frequency and with more tools or strategies from the teachers.

On the other hand, the category *lack of exposure to the writing skills* revealed that learners did not have enough opportunities to work on it which impeded their development of written exercises. Besides, the l*ack of lexis in the L2* pointed out that the learners did not have enough vocabulary which prevented them from achieving the activities assigned for the writing process in the EFL class.

Additionally, the category *lack of writing skills* suggested that students were not skilled at the writing skill because they displayed serious problems in spelling, word order, tenses, connectors, and coherence. These weak grammatical, syntactic and semantic patterns did not provide the command students need when writing.

Action stage. The action stage of the present research project about the influence of ICT in the development of writing skills consisted in the implementation of six writing workshops and an evaluation stage, in which the use of a commercial internet platform was used to provide students with rehearsal on the main aspects required for the writing skill in response to the approach proposed by Harmer (2011). Each workshop was designed according to the program template which emphasizes a holistic view of learning incorporating linguistic, pragmatic and sociolinguistic objectives. This exposes students to meaningful tasks aligned to their daily life experiences following the steps of engaging, studying and activating through Content Language Integrated Learning (CLIL) approach to improve writing skills. The workshops corresponded to a pre-stated lesson planning approach established in the curriculum to which this proposal about ICT and the writing process wheel was adapted.

Evaluation stage. In order to wrap up and evaluate the impact of the platform on this research project about the writing skill of A2 level EFL students, an evaluation stage was carried out after the implementation of the six workshops in which the learners were exposed to the writing wheel (Harmer, 2011). A lesson was planned to explore and describe the students' performance, achievements, and difficulties in the process of learning English, specifically concerning the writing skill and the writing process wheel which comprised linguistic, pragmatic and sociolinguistic competences. The results can be read in table 2 along with the operationalization and the amount of frequencies from workshop 1 to workshop 7.

Table 2
Triangulation of categories in workshop 1 to workshop 7

Codes	Operationalization	WORKSHOPS Frequencies						Evaluation	TOTAL	%
		W1	W2	W3	W4	W5	W6	W7		
1.CALL Benefit	Code describes the use of the computer along with the platform and the usefulness in order to enhance students' written production	23	15	17	17	19	20	22	133	21,5%
2.Efficient final version	Code describes the achievement of the final task after being exposed to the process writing cycle.	0	18	15	16	15	18	19	101	16,3%
3.ICT Tool use	Code describes the use of power point presentation, word document, online dictionaries, use of the right bottom, the use of application on the platform, web or computer along with the tools provided by the platform.	9	11	14	13	14	15	18	94	15,2%
4.Efficient Drafting	Code describes students' ability to write by themselves to complete the writing task.	0	11	11	14	15	15	16	82	13,2%
5.Efficient Planning	Code describes the information to be written down in the drafting stage such the best ideas for inclusion, simple and compound sentences	0	12	11	12	14	14	16	79	12,8%

6.Efficient Editing	Code describes instances of improvement after students' taking into account feedback from teacher	0	10	9	11	10	13	14	67	10,8 %
7.Lack of writing skills	Code describes the lack of grammatical, semantic, syntactic, morphological patterns students have when writing.	17	11	10	9	7	5	4	63	10,2 %
Total		49	88	87	92	94	100	109	619	100 %

Note: Triangulation of categories in evaluation stage.

Table 2 indicates that there was significant progress, specifically in the categories *CALL Benefit*, *Efficient Final Version, ICT Tool Use, Efficient Drafting, Efficient Planning, Efficient Editing and Lack of Writing Skills,* and that that there were steady frequencies throughout the implementation and the evaluation stages.

Findings

In order to account for the way A2 learners communicate through writing in platform, information was collected from the instruments already mentioned: a diary, an observation, a Likert questionnaire, a lesson report and a survey. The findings showed the usefulness of ICT in the EFL classroom in order to improve students' writing performance and vocabulary along with their willingness and confidence towards the writing process wheel to write different kinds of paragraphs.

First of all, students showed interest and enthusiasm working with the activities proposed using the *Quia* platform; in those activities, learners practiced vocabulary, grammar, and were enrolled in some games where their attitudes indicated that they enjoyed and learnt from it. Additionally, it was an engaging tool since it was new for the students in terms of language practice; the exercises gave the learners the chance to see vocabulary and expressions that could be acquired and taken into account in the final version of the paragraphs. The platform was a key factor that positively affected the students' commitment and willingness to complete the written tasks. Writing was easier for student when compared with their performance in paper and pencil tasks; this helped them to improve their perceptions about the writing skill. Students stated that the content on the platform, aligned with the exercises and grammar, was fruitful because they could develop the assigned tasks expressing their ideas with more linguistic tools. Plus, they were able to recall information from the platform by going back and forth which helped them perform better in their written portions; they used the vocabulary worked covered in the lesson, they

went back to some exercises to check grammar, words, expressions, connectors, and they connected the ideas from the platform to develop their own discourse. Moreover, they gained confidence when writing the first version of their paragraphs; they were skilled at writing on the computer since they came up with their ideas in a faster and more logical manner. Consequently, when some help was required, they performed better because of collaborative learning. Another important finding was related to efficient language feedback which permitted them to write opinion, narrative, expository, and contrasting and comparing paragraphs about various topics. These paragraphs were useful in the sense of enhancing students' writing ability because the learners made significant progress in spelling, mechanics, punctuation, and language coherence. A progressive reduction in the frequencies of the category l*ack of writing* skills provided evidence of the positive impact of the ICT exposure on the learners' writing production; this was also confirmed by the same reduction of occurrences in most of the errors in the assessment rubric used by the researcher in each workshop.

Thus, the continuous practice of language forms with the help of the *Quia* platform assisted the learners to include in their writing productions linking words, connectors, transition sentences, and vocabulary with a significant reduction of both grammatical and syntactic errors, producing coherent paragraphs that displayed a logical sequence of ideas.

El Ministerio de Educación Nacional in Colombia (2004) states that the use of technology in the classroom enriches the learner's environment and allows them to experience new knowledge from traditional classes. Throughout the workshops, students' work evidenced that the online activities provided by the platform were sufficient since they did not require additional online web pages to develop the exercises; the paragraphs written by the students provided showed that they incorporated in their discourse words, expressions, and connectors rehearsed in the platform. According to their testimonies in the different data collection instruments, the computer lab was interesting and the use of the platform was innovative in their language learning process, which confirms how Huberman (cited in Ministerio de Educación Nacional, 2013) characterizes innovation "as new practices that are taken to the classroom even when they have been carried out in other places" (p. 17, translated).

Additionally, in the early stages of this project the students' outcomes were characterized by their poor performance in the writing skill; specifically, they did not connect ideas coherently, they wrote without planning, they lacked vocabulary and grammar, they took time writing on the keyboard, they were unsure about what to write, and they described the process of writing as a tedious and stressful skill. Their performance suffered from poor lexis, morphological, syntactic, and grammatical patterns. In the diagnostic stage, they revealed that they did not receive enough advice in their written production which impeded them to develop their written portions. As a consequence, they did not know if what they were writing was right or if an improvement was needed. Likewise, Harmer (2001) points out that *"*one of the things students expect from the teacher is an indication of whether or not they are getting their English right" (p. 59).

After the interventions, students' behaviors and attitudes or affective factors changed dramatically regarding writing along with their written performance. Each member of the collaboration has access to others' mind and knowledge, imbuing the task with a sense of shared goals. Besides, the editing stage assisted students to pay attention to the aspects of spelling, word order, word choice, tenses, proper use of subjects, capitalization, vocabulary, structure, organization, content, and mechanics to develop a good piece of work. Particularly, it was seen that learners improved their performance after the process of revision which is congruent with Ur's ideas (2003) that *"most of the feedback we give our learners is ongoing correction and assessment with the aim of bringing improvement"* (p. 242). They were able to write independently, having a good command of lexis and grammar acquired from the platform; what is more, their attitudes towards writing changed because of the writing process wheel. More precisely, learners found it easier to write because they had vocabulary and grammar to develop their ideas in a coherent way. Accordingly, this finding ratified that CALL (as stated in Liu, 2013) enhances language learning; specifically, in the following areas:

> Language functions (Beatty, 2003; Chang, 2005; Crook, 1994), greater levels of participation (Gonzalez-Bueno, 1998), reduce anxiety (Kessler, 2010; Ritter, 1993), and promote more motivation and interest and greater autonomy (Chang, 2005; Kessler & Bikowski, 2010; Leakey & Ranchoux, 2006; Vinther, 2011) (cited in Liu, 2013, p. 301).

Tables 3 and 4 illustrate the results of assessment in workshop 1 and improvement in workshop 6.

Table 3
Writing rubrics

Results of assessment of draft		Results of assessment after edition	
Codes	Number of errors	Codes	Number of errors
S = Spelling	11	S = Spelling	2
W. O= Word order	4	W. O= Word order	0
W.W= Wrong word choice	4	W.W= Wrong word choice	1
T= Tense	10	T= Tense	2
? M= Meaning	7	? M= Meaning	1
λ =Missing subject	11	λ =Missing subject	2
C= Capitalization	3	C= Capitalization	0
Vocabulary	3	Vocabulary	1
Structure	4	Structure	1
Organization	3	Organization	0
Content	0	Content	0
Mechanics	8	Mechanics	2

Note: Comparison of assessment results in draft and edited paragraph in workshop 1.

Table 4
Writing rubrics 2

Results of assessment of draft		Results of assessment after edition	
Codes	Numbers of errors	Codes	Numbers of errors
S = Spelling	6	S = Spelling	2
W. O= Word order	2	W. O= Word order	0
W.W= Wrong word choice	4	W.W= Wrong word choice	1
T= Tense	4	T= Tense	1
? M= Meaning	2	? M= Meaning	0
Λ= Missing Subject	0	Λ= Missing Subject	0
= C Capitalization	0	= C Capitalization	0
Vocabulary	3	Vocabulary	1
Structure	1	Structure	1
Organization	0	Organization	0
Content	0	Content	0
Mechanics	2	Mechanics	1

Note: Comparison of assessment results in draft and edited paragraph in workshop 6.

Tables 3 and 4 exemplify the mistakes found in the first version of students' draft and the results after editing it. The edited version of the paragraphs in the first workshop led to a significant reduction of errors mainly in spelling, tense, meaning of texts, and the missing of the subject in sentences. According to the students' comments in the questionnaire, this aspect was a result of the *Quia* platform during the edition stage of the writing wheel in which the feedback of the teacher was of paramount importance. That progress was mainly made thanks to the different activities provided by the platform; for instance, games which according to the students' attitudes were useful in order to do the activities actively. Each of the exercises on the platform provided learners with the necessary input to develop their written portions, allowing them to use the expressions worked on in the activities without the necessity to interact with other online pages. This is very reliable taking into consideration what Olshtain (2001) indicates about matching tasks and other word games that students can practice on the computer: "it enables the learners to develop effective recognition habits based on distinctive graphic features, many of these have the form of games, puzzles, and other "fun" activities" (p. 212).

The implementation of this research provided evidence that ICT and EFL curriculum can be included in lesson planning to improve language teaching and learning conditions; six workshops with their correspoding lesson plans provided the program with new possibilities to articulate language and ICT; 12 sessions in which 48 word games were played, 48 language exercises were completed, 24 reading comprehension tasks were carried out not only helped the participants to improve their writing skills, increase their

vocabulary inventory, and build confidence towards the writing skill, but also become pedagogical tools that both teacher and students took advantage of for the improvement of their environment.

The use of the computer lab supported the development of language skills, since the varied exercises had a significant influence in learners' language performance. This fact showed that the combination of ICT and EFL teaching strategies as a curriculum innovation aligned the institution with current trends and policies in education according to which technology is used to raise the students' level of interest and their language proficiency. This means that the proposal had a positive impact in the setting by promoting ICT in response to international, national and local guidelines and policies aiming at reducing the digital divide (Ministerio de tecnologías de la Información y las Comunicaciones, 2013) in the educational system. In the implementation of this proposal it is important to highlight that the learners had full access to technological resources in the institute and this represented signicant progress concerning ICT and bilingualism objectives considered in the local, regional, and national development plans.

Conclusions

The implementation of technological resources such as computer, video beam, tape recorders, and networks increases students' interest, enthusiasm and language understanding and command. These kinds of resources encourage students to interact with the language in an interesting and different way assisting them to grasp meaning easily. Moreover, the use of text material, images, videos, and audios in EFL lessons focused on writing leads students to more achievements; the implementation of strategies such as prediction and linking words help them learn vocabulary, grammar, syntactic rules, and semantic principles. The use of these resources is strongly suggested to motivate, engage, and activate students' knowledge at all levels in the educational system.

The use of commercial platforms that provide students opportunities to rehearse language material has a relevant influence on students' performance because it helps them improve syntactic, morphological, and grammatical patterns. Online tools help students process information and rehearse language forms within different approaches according to language skills, for example the writing process wheel. These ICT tools raise students' interest in the foreign language in a meaningful and engaging manner, allowing them to interact with the language in context.

The use of the English computer lab in the traditional classroom provides language learning with additional strengths because students are skilled at computer operation and know how to navigate useful online web pages which represents a positive influence of ICT in curriculum design and development; teachers, administrators, and policy makers in boards of education should encourage the strengthening of ICT use for language teaching in order to lead the students to higher level of proficiency stemming from their digital citizenship condition.

The usefulness of the writing process wheel with the support of an online platform increases students' ability to write in English. The planning stage permits students to increase their vocabulary; it allows students to plan their ideas using key concepts, simple or complex sentences which help them to establish a framework to be developed in the drafting stage. Moreover, it encourages students to ritualize their written productions by planning in advance which words to consider. Teachers should promote the writing habit in the classroom by teaching students to follow the stages in the writing process wheel so that they improve their style following a logical sequence in the organization of their ideas. Similarly, teachers are invited to include the ICT-assisted writing process wheel as a strategy in their lesson plans to motivate students to write so that they gain confidence writing in English.

The writing process wheel in combination with ICT tools such as online platforms augments student's confidence, letting them come up with coherent and logical ideas. Students have more time to think, rethink, revise, edit, and incorporate feedback into their writing production than they do when working with traditional resources and strategies. Besides, interaction with ICT resources, tools, and applications makes students feel confident with the language by having a support represented in feedback, correction, modelling, examples, and the like that help them achieve common language goals. I strongly recommend including ICT-based methodological teaching and learning strategies in the EFL curriculum in all institutions, so that students can work independently while acquiring writing skills.

The writing process wheel assists English teachers and students towards the improvement of the writing skill because each stage permits learners to think critically and revise their written portions as many times as possible to get a better performance. This teaching learning strategy ratifies the theory proposed by White and Arndt (1991) that writing is "re-writing…re-vision" seeing with new eyes which is a main characteristic of the writing process wheel to help learners to become better at writing. It is essential that teachers provide opportunities to write in the classroom so that students can develop each of the stages, all of them should be under observation so that teachers can guide the process making it more meaningful. This enhances language aims because the teacher is aware of what students are doing giving them a hand in the activities with the support of ICT tools. In addition, this fact helps students to carry out activities in the expected way which, according to Harmer (2001) "is one the things students expect from the teacher: an indication of whether or not they are getting their English right" (p. 59). Teachers should monitor students' activities also when they are using ICT tools to make sure they are on the right route; otherwise, to direct them ahead in the task.

All in all, the use of Information Communication Technologies (ICT) influences students' writing skill because it motivates them to write, augmenting their enthusiasm, motivation and self-confidence; additionally, the use of ICT permits them to increase their awareness of syntactic, morphological, and grammatical patterns when providing their

points of view. The importance of the present study lies in the fact that it serves as a basis for further studies of the writing process wheel cycle with the use of ICT. Furthermore, this study may inform readers about the actions, perceptions, roles of ICT, students' and teachers' roles, teaching tendencies, and techniques used in the English language teaching contexts in one public university.

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