

# DEVELOPMENT OF L2 ACADEMIC WRITING THROUGH THE USE OF ICT TOOLS

A Thesis Presented by

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Submitted to the School of Languages of

Universidad de Antioquia Medellin in partial fulfillment

of the requirements for the degree of

MAGISTER EN ENSEÑANZA Y APRENDIZAJE DE LENGUAS EXTRANJERAS

November 2016

Master's in Foreign Language Teaching and Learning

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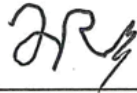
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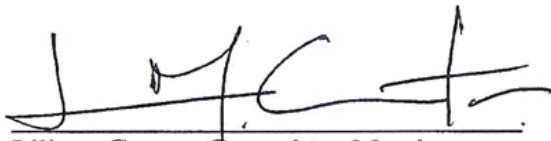
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## DEDICATION

To my family and girlfriend, who understood and supported my devotion to this project.

They are one of the reasons why I am here.

## ACKNOWLEDGMENTS

I would like to thank my thesis director, Juan Rodrigo Bedoya for his thoughtful, patient guidance and support. Thanks are also given to every single professor that made part in the master's program with their knowledge as their maximum contributions. All of them made possible my professional development and will forever be appreciated. Next, I would also like to extend my gratitude to my thesis director for his helpful comments and suggestions on all stages of this project. Furthermore, I want to thank the institution and the students that took part in this study with their valuable time and information contributing to this thesis. Special thanks to all the individuals who volunteered their participation in this project. Finally, I want to thank all of those whose support and friendship helped me to stay focused on this project and provided me with the encouragement to continue when the going got tough.

## ABSTRACT

### DEVELOPMENT OF L2 ACADEMIC WRITING THROUGH THE USE OF ICT TOOLS

November 2016

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The present study set out to inquire for the impact online tools may have on the development of academic writing skills in a group of EFL students. For this purpose, strategies were implemented in a platform that allows collaborative writing. The data collection was carried out through four writing sessions where seven EFL students were analyzed mainly through two focus group interviews, a questionnaire and students' comments gathered during the writing process. The findings show that the implementation of the online tools contributed in aspects such as the positive impact on vocabulary and grammar development, the interaction of the participants with multiple tools offered by the platform encompassing collaborative work; the efficiency and the optimization of time when working in the writing tasks, and lastly, the impact motivation had on the participants when working on the platform. Finally, as part of the conclusions, it is important to acknowledge the advantages of the ICT tools over the traditional tools, integrating the TPACK as a fundamental pillar that encompasses teachers, technology and L2 academic writing.

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## **Introduction**

It is evident that the world has evolved rapidly during the last decades, and with this constant change, technology has been adapting as well. According to Castells (2005), such change “is associated with the emergence of a new technological paradigm, based in information and communication technologies” (p. 3). Technology began its transformation around the 1970s throughout the world, dispersing unevenly. Castells also states that society shapes the function and use of technology “according to the needs, values, and interests of people who use the technology” (p. 3). Therefore, as he says, technology is not determined by society, but “it is society” (p. 3). Regarding the aforementioned idea, information and communication technologies are adapted based on the uses that society makes of them.

Technology has permeated all the spheres in modern global society from science and economics to education. This is why in western countries there have been governmental initiatives to support development and the stimulation research in schools (Lowyck, 2014). As a clear example of such initiatives, Colombia created the ministry of ICT, in 2009, formulating several clear objectives in pro of the development of ICT in the country. One of its objectives is to “promote the development and strengthening of the sector of Information and Communication Technologies, promote research and innovation, seeking its competitiveness and technological progress in accordance with the national and international environment.” (Ministry of ICT, 2009). However, the expectations that are set by policy makers are often unrealistic “due to lacking knowledge of the multidimensionality of technological solutions for education” (Lowyck, 2014, p. 5). Commercial organizations respond to the demands of society without any considerable effort concerning “efficiency, effectiveness and relevance of

educational products and processes” (Clark, 1983; Salomon, 2002 as cited in Lowyck 2014, p. 5). It is for this reason that educational organizations and schools have to consider what school administrators need to know about educational technology in order to have lasting and innovative technological implementations. At the same time, students and teachers have to learn how to cope with the new challenges that accompany all new technological applications.

Regarding the use of technology in education, it is influenced by the trends of society, dictating the way in which the educational field has been developing. Consequently, the problem starts when a determined society attempts to dictate how technology should be implemented, convinced that it is the sole answer to all of its learning difficulties. Such conviction is often spread through the society’s technological affordances misleading the implementation of technology. In fact, according to Lowyck (2014), “expectations function as macrohypotheses that are progressively shaped and falsified during implementation, often resulting in more difficulties and less productivity than initially expected. One waits for the next, more powerful learning theory or tool” (p. 4). Therefore, the perspective of the present study is that the sole use of technology is not the panacea for an effective education, especially when it refers to second language acquisition where there must be knowledgeable agents to carry out the teaching process. The required knowledge for an effective education through technology is encompassed in the pedagogical strategies, the command of the language, and the use of technology itself.

Regarding the use of technologies in language teaching, communication technologies are used to teach and learn in contemporary times. According to Warschauer and Meskill (2000) the basic skills for communication such as writing, reading and speaking have migrated to digital sources, which makes language educators

reflect not only about how to use technologies effectively to teach language, but also about how to teach language according to students' needs. For instance, nowadays, students need to learn about how to write emails or do research on the web, whereas in previous generations these skills were not taught due to the different ways of communicating, and also to students' priorities (Warschauer & Meskill, 2000). People did not use to communicate via e-mails, write blogs or wikis, but the communication was carried out through the traditional tools: paper and pencil.

Warschauer and Meskill (2000) also state that new information technologies are considered to have great relevance as a means of communication which is legitimate, and not just tools to teach language. Therefore, according to these authors, language educators, nowadays, not only think about teaching grammar rules, but also about involving learners into the apprenticeship of new discourse which is achieved when learners are provided with tools that allow them to explore various aspects of society, culture and language. Thus, the role of computers is to improve the pedagogical process, allowing teaching, communication and involvement of learners in their own learning process mediated by online environments. Warschauer and Meskill (2000) posit that students can be prepared well enough by educators to help them face cross-cultural communication, which is essential for personal and professional success through the use of new technologies, which is extended to the acquisition of language. For this reason, in today's Colombian context, teachers must demonstrate they are capable of using online tools to teach a second language. This has even been a requisite from the Colombian Ministry of ICT for all educational institutions, but there is still much to do in order to have teachers fully prepared to comply with this mandate.

Consequently, second language acquisition has been benefited from the incorporation of these technological tools into the teaching field developing the

different skills a language is composed of (writing, reading and speaking) and that the learner needs to develop in order to have a fulfilling language learning experience. Writing in L2 is not the exception, since today, more people are engaged with these technologies to help enhance this complex and necessary skill, especially in the academic world.

Writing in a second language is a skill that requires effort from the part of the learner and specific training from teachers. Besides, it is one of the most complex skills to be taught due to its variety and intricacy. Despite such exigencies, it cannot be overlooked because it is undoubtedly, one of the most used interactional ways of communication, and it “has proven to be one of the most influential technologies ever invented” (Prior, 2008, p. 111).

One of the most challenging ways of written communication is academic writing, which is a “genre within the larger field of academic literacy. Academic literacy is more than the ability to read and write effectively. It also includes the capacity to adapt smoothly to the cultural, linguistic and social milieu of academic departments and institutions” (Lee as cited in Åberg, Ståhle, Engdahl & Knutes-Nyqvist, 2016, p. 33). Academic writing requires a set of conventions needed when producing a text. Such conventions include selecting the correct words, using adequate grammar and applying accurate punctuation as well as having cohesion and coherence. Irvin (2010) asserts that “academic writing is always a form of evaluation that asks you to demonstrate knowledge and show proficiency with certain disciplinary skills of thinking, interpreting, and presenting” (p. 8). This type of writing is based on reliable sources, which in turn, makes the information truthful and objective. This means that the writer must not convey biased or misleading facts.

Taking into consideration all the strict conventions, academic writing is an effort demanding activity, especially when it is carried out in a foreign or second language (L2). The level of difficulty increases when the learners who need to develop this skill are EFL high school students. They are not accustomed to carrying out this kind of activity, not even in their L1. The aforementioned statement is well supported by Sundre (2002) who posits that, “writing assistance in higher education seems not to prepare them well for scholarly publication in English” (as cited in Wang & Bakken, 2004, p. 223). This is, undoubtedly, a problematic situation evident within today’s education system, especially, in the Colombian context taking into account that there is a need for English language teachers to be well prepared both in the language itself and in the skill of academic writing. Therefore, academic writing in L2 needs supervised training and guidance, which can be obtained through the use of ICT (Information and Communications Technology).

The use of Information and Communications Technology (ICT) tools has proven to be effective in helping second language students develop writing skills showing different ways L2 writing is taught. This idea is well supported in Melor, Salehi, and Chenzi’s study (2012) in which ICT tools were used to teach ESL writing. The results show some benefits for students such as increasing their motivation, helping them improve their vocabulary and their learning process, helping them train thinking skills and promoting meaningful learning. Accordingly, Hyland (2004) states that technology “obviously offers opportunities for learners to engage with the creative process of construction and for teachers to help make their writing processes more transparent and effective” (p. 145). Therefore, ICT tools may offer teachers and students possibilities to work on academic writing by means of the use of Web 2.0 tools such as blogs or wikis.

Some studies aim to contribute to language learning or the development of other types of writing such as narratives (Herrera, 2013), reading and writing for children mediated by ICT (Suárez, Pérez, Vergara, Alférez, 2015) and the support of academic writing process (Åberg, et al. 2016). These studies also contribute to the existing problems faced by schools and universities nowadays regarding the lack of instructions to develop academic writing, but few studies have contributed to the development and improvement of academic writing in L2 mediated by ICT tools. Regrettably, most of the students who have to write in L2 do not receive formal instructions that prepare them for new exigencies, which is a big hindrance as such requirements will be requested by the majority of universities in the country. Gómez (2011) stated in one of his reports that “the norms, preferences, and rules about written communication were not learned in the classroom but gleaned from their cultural and disciplinary context” (p. 208), but as he also asserted, there is “a state mandate for all students to demonstrate a basic level of English proficiency that is enforced in every department of public institutions of higher learning” (p. 207), which is also extended to some private universities.

In Colombia, there have been some studies that have assessed the development of writing mediated by ICT tools. For instance, a study conducted by Cuesta and Rincón (2010) about the use of e-portfolio dossier and the genre process approach. Another study carried out by Muñoz (2010) about writing development in children of first grade, mediated by the use of instructional materials. A research conducted by Fontalvo and Ariza (2011) about the development of academic texts mediated by media and information technologies. And finally, a study conducted by Gómez and McDougald (2013) inquired into the importance of the role that feedback within peers played in the development or maintenance of writing coherence in the elaboration of non-fictional narrative blogs.

Taking into account the aforementioned information, this study intends to contribute to the field by means of the integration of the ICT tools into the regular language teaching by providing guidance and support to the process of the development of academic writing in L2 through those tools. This is the reason this study is based on the following research question:

**Research Question**

How may the use of ICT tools help a group of EFL high school students develop academic writing skills?



## **Theoretical Framework**

This section introduces the theoretical principles that frame this study. First, the socio-cognitive approach will be explained from the perspectives of cognition, second language acquisition and learning. Then, the Technological, Pedagogical and Content knowledge (TPACK) will be described as the integration of ICT into language curriculum. After that, the main concepts such as writing and its views, academic writing, L2 writing, collaborative writing, and web 2.0 tools will be described. Next, some similar studies to the field will be reported. Finally, the data analysis and the findings of this study will be presented.

### **The Socio-Cognitive Approach**

The socio-cognitive approach is a fundamental theoretical framework for this study because it encompasses a view of learning in which cognition and the social environment interact in a mind-body-world relationship which “function integratively in second language acquisition” (Atkinson, 2011, p. 143). According to Atkinson (2011), a socio-cognitive approach has implications in the definitions and understanding of three main areas: cognition, second language acquisition and learning.

Cognition is defined by Atkinson (2011) as “adaptive intelligence”, that is, cognition has to be directly related with the environment surrounding it. This view of cognition is different from the one that claims that individuals learn in isolation, through no contact with their environment and only in virtue of mental processes. Adaptive intelligence is useful to help us survive and succeed in our ecosocial worlds, and it is spread and distributed to the world by means of tools created by humans, that is, perception, cognition, and motor action are joined phenomena, which stress on the suggestion that “others’ actions and intentions are comprehended by having an embodied “feel” for what they are doing, saying, etc.” (Atkinson, 2011, p. 145). It

means that having the body involved with actions will allow it to have a synchronization of performance of individuals' behaviors and "adaptive cooperative social action" (Atkinson, 2011, p. 145). Individuals must be aligned and tuned to the environment in a dynamic process of interaction. This is why such alignment or synchronization of behaviors needs reciprocal expectations and understandings from individuals. Cognition helps align with the environment that surrounds us, and it is here where the mind plays an important role to survive and prosper. As Atkinson (2011) states, "cognition and its supporting environment are at least sometimes functionally integrated" (p. 145).

Regarding the concept of language, it is defined, from the socio-cognitive point of view, as "a tool for social action" (Atkinson, 2011, p. 146) that must be adaptive in relation to the environment. For the purpose of this social action, individuals need to have coordination skills that allow them to perform joint action, which leads them to be aligned and synchronized. That is why language acquisition and language comprehension are involved in observable activities that can be unlimitedly accessed to other individuals and not restricted to isolated cognitive spaces which are not displayed.

Finally, in relation to the conceptualization of learning, Atkinson considers it as a continuous process with the world, which has implications as follows: learning is constantly adapted to the environment, it can be accessed in an unlimited way, it makes action possible in the world, and it occurs through action in the environment. This socio-cognitive approach claims that learning takes place through experience and through a continuous adaptation to people's environment, therefore learning is consequential, otherwise, it would be abstract and decontextualized.

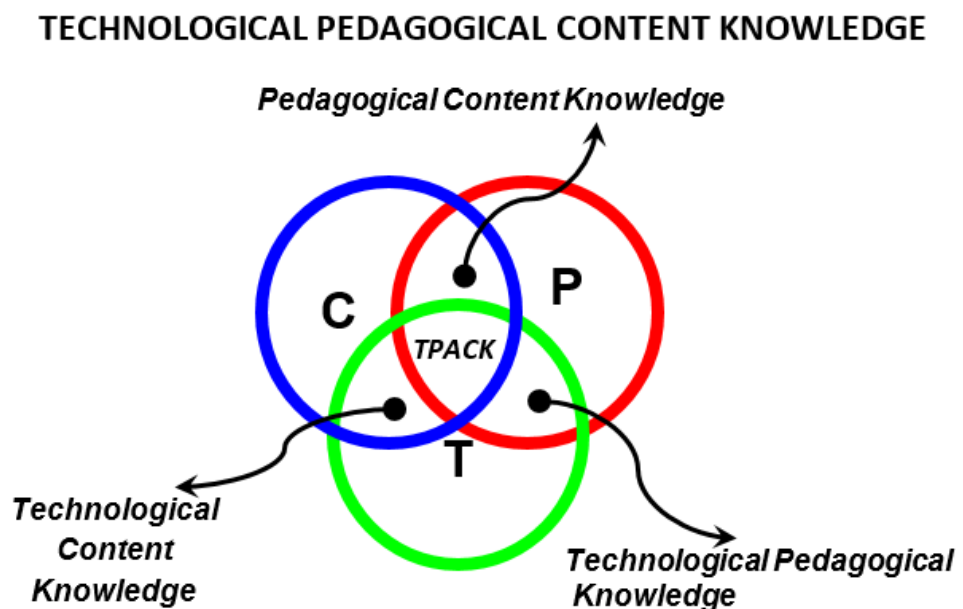
This project fits into this approach since participants had to develop writing tasks not only individually, but also collaboratively, interacting among themselves through computers, online tools, and even with the teacher in order to learn elements of

academic writing. To reach this goal, these participants needed to use their mental capacities, as well as the elements that surrounded them.

### **The TPACK Approach**

Having explained the socio-cognitive approach through which the learning process is viewed, it is pertinent to focus now on the approach that encompasses the teaching decisions taken for this project: the TPACK.

The TPACK or Technological, Pedagogical and Content knowledge is an approach that postulates that the effective integration of ICT into the language curriculum requires the interaction of these three pieces of knowledge, which means that language teachers interested in such integration into their teaching practices need to establish a dynamic interaction between those pieces of knowledge as shown in figure 1.



**Figure 1. The Technological Pedagogical Content Knowledge Framework**

Such pieces of knowledge are now explained: Content knowledge (CK) refers to the knowledge teachers are responsible for when teaching. Pedagogical knowledge (PK) refers to the knowledge teachers must have about “a variety of instructional practices, strategies, and methods to promote students’ learning” (Mishra & Koehler as cited in Koehler, Mishra, Kereluik, Shin & Graham, 2014, p. 102). And technological

knowledge (TK) refers to the knowledge teachers must have about “traditional and new technologies” they must be capable of integrating in the curriculum. Those foundations stated by Mishra and Koehler will allow teachers to have a deeper scope and more variety within their teaching practices, looking at technology as a powerful means that can transform teaching itself and students’ learning outcomes.

There have been some studies framed by the TPACK model in teacher development and in education in general. For instance, a study carried out in Australia (Hanewald, 2013) reports a community of practice for pre-service and in-service teachers who wanted to make contact with other teachers both in Australia and in Asia. They used some online social networking platforms such as “edumodo” and “ning” in order to bridge the vast geographical distance within Australian and Asian teachers, since the Australian Government has had an increasing interest in fostering competences regarding translingual and transcultural aspects in schools in order to facilitate future engagement between these two geographical places. Another study examined the use of the TPACK model in in-service secondary teachers of science who participated in a program related to professional development in order to support this subject for a better preparation of students for the science and technology of the present century. The programs used for this study were “ mind-mapping tools, Internet applications, digital images, probeware, movies and computer simulations. The programs of both studies were found to have positive impact on teachers.

Now that the socio-cognitive approach and the TPACK have been described, several conceptualizations that are relevant for the elaboration of this project will be explained. The basic concepts regard writing, both in L1 and L2, plus the way this skill is viewed from several perspectives. They also contemplate academic and collaborative

writing, and finally, web 2.0 tools which is a key component for this project. Now, such explanations will be developed:

## **Writing**

According to the literature, writing is presented under several views or types depending on the perspective that each author has about them. They are writing as a personal expression, writing as a cognitive process, writing as a social interaction, writing as a social construction and finally, writing as a situated act. These views will be developed in the following segments:

### **Writing as a personal expression.**

This view enlivens writers to produce their own texts being spontaneous finding their own voices. This view is based on the assumption that “thinking precedes writing and that the free expression of ideas can encourage self-discovery and cognitive maturation” (Hyland, 2002a, p. 23), which means that personal and writing development are intertwined, fostering clear thinking and self-expression that is satisfying for the individual. This view sees writing as a creative act that allows the writer to have this sense of discovery giving relevance both to the writer’s process and product. Since the expressivist view (writing as a personal expression) sees writing as a skill that is learnt and not taught, teachers are placed as agents that must allow writers to come up with their own ideas stimulating their creativity and thinking process in a cooperative environment. This is well supported by Hyland’s statement (2002a) when he says that “the teacher’s role is to be non-directive and facilitating, providing writers with the space to make their own meaning, through and encouraging, positive, and cooperative environment with minimal interference” (p. 23). However, there is a drawback which does not allow to evaluate good writing because of the lack of explicit

theoretical principles, due to the fact, that under the expressivists' point of view, the rule application is not reflected, giving importance to the free imagination of the writer.

### **Writing as a cognitive process.**

Writing as a cognitive process is viewed as “essentially a problem-solving activity” (Atkinson, 2002, p. 24), where there is complexity regarding activities of planning and editing, the task influence, the long-term memory of the writer and the task environment. According to Flower and Hayes (1981), there is a model to follow when the writer undertakes a composing process. Some of those features are: Writers establish goals and a plan, texts can constantly pass through a process of revision and evaluation, a monitor oversees the whole writing process.

### **Writing as social interaction.**

This type of writing is viewed as an interaction between writers and readers with an additional component which is “a communicative dimension to writing” (Hyland, 2002a, p. 30) which explains the writer's decisions when producing a text. Such decisions regard the following aspects: interests, necessities and understandings of the potential readers. According to Nystrand (as cited in Hyland, 2002a), the writer elaborates the text according to what he or she assumes about the reader's expectations and knowledge, therefore the reading process is a matter of prediction of the text in accordance with the assumption about the purpose of the writer. With this type of writing, the writer seeks for a negotiation process of the meaning that is not transmitted from one individual to another, but it is created in interaction, that is, between the participants. The concept of writing, under this perspective is not an activity done in isolation, instead it is a joint action endeavor where the writer assumes the reader's understanding and beliefs so that he or she can adapt the texts in order to suit an audience in particular.

### **Writing as social construction.**

Here the writer is not considered neither a creator nor an interactant, but as a member of a community (Hyland, 2002a). “The communicating dyad is replaced by the discourses of socially and rhetorically constituted groups of readers and writers” (Hyland, 2002a, p. 40). The writer depends on a social group’s affordances as Hyland (2002a) posits “writing is tied to systematic forms of social organisations and has to be seen as a basic form of cultural practice” (p. 41). This means that the writers are influenced in relation to other people’s ideas and texts belonging to their social groups, in other words, they are influenced by their own culture. Social construction lays the foundation on the conception that people’s thoughts and concepts used to have a better understanding of the world are “all language constructs generated by knowledge communities and used by them to maintain coherence” (Bruffee as cited in Hyland, 2002, p. 34). That is to say, that the interactions occurring among people generate the environment they consider to be true. Therefore, in the context of written texts, writing is influenced by community genres by using that community language.

### **Writing as a situated act.**

This view foregrounds the impact of the immediate context of writing performance of individuals. Hyland (2002a) posits that “writing is seen as a social act that can only occur within a specific situation” (p. 30). Consequently, the individual attitudes and the social experiences that the person has, influence this writing process, which comes along with expectations, prior knowledge and assumptions from part of the writer and that are intertwined with the writing environment. These settings or writing environments where writing is carried out are seen as places for interactions, where the rules and the relationships that intervene can facilitate and restrain writing. In accordance with Prior (as cited in Hyland, 2002a), this explains why writing as a

situated act does not see writers as isolated agents, but as individuals who are affected by activity streams such as observing, reading, acting, talking, thinking, as well as writing. This view of writing opposes the idea of the individual as an isolated creator, instead, and as Flower (as cited in Hyland, 2002a) posits, the writer is permeated by context, which concurrently leads to cognition. This is the reason the most important conceptualization for this project is writing as a situated act because it frames the main features of the socio-cognitive approach. Thus, this type of writing assumes that the individual has an adaptive intelligence which allows him or her to produce writing texts through an interaction with his or her environment.

This study is framed within the process oriented approach which is defined by Tribble as “an approach to the teaching of writing which stresses the creativity of the individual writer, and which pays attention to the development of good writing practices rather than the imitation of models” (as cited in Holmes, 2000). There are commonly four stages that are taken into account to follow this approach. They are: planning, drafting, proofreading or revising, and finally editing. A meaningful benefit learners have with this approach is the availability to return to the first stage of the process once they have reached the editing step. Therefore, this approach provides writers with constant possibilities of writing development going from the last stage to the first one whenever it is considered pertinent during the whole process. This approach also offers the alternative to write either individually or collaboratively.

Now it is pertinent to discuss about writing under the view of what writing for academic papers means or needs. Although there are no absolute rules that can dictate how to write properly following this type of writing style, a general description of items will be developed in the following paragraphs with conceptualizations viewed from several authors which encompasses academic writing and L2 academic writing.



## **Academic Writing**

According to Hyland (2002b), “academic writing, like all forms of communication, is an act of identity: it not only conveys disciplinary ‘content’ but also carries a representation of the writer” (p. 1092). This suggests the need for the writers to choose the words that are aligned to their specific community and genre when writing, in order to be understood and at the same time to influence and persuade readers. The use of those words and genre, and the way writers decide to use them determines who the writer is. Therefore, academic writing is not only about using a set of strict conventions, but it is also about handling with cultural and social practices.

For academic writing learners, this type of writing requires from them to work on invention, multiple drafts, editing and sometimes, depending on the writer’s decision, peer response. In order to convey a meaningful message, the writer may emphasize on critical thinking, so that she or he is aware of the impact of the choice of words on the reader. The writer needs to use the appropriate vocabulary and grammar in order to avoid a biased message, and he or she also needs to be aware of how important the reader is for him or her in order to express clearly and directly what the writer wants to communicate (Zemach & Rumisek, 2005). The most common writing modality is essays, which is clearly seen in the majority of the courses in colleges and universities to assess students’ work (Bailey, 2006).

As academic writing implies a series of steps and regulations that result in effective development of the conveyed message, writers need to develop the writing skill to integrate a broad variety of knowledge so as to “create extended written discourse” (Bruce, 2008, p. 1) that has the accurate linguistic forms and the appropriateness to convey messages to specific social areas. In accordance with Irvin (2010), academic writing success relies on how well writers understand what they write

and then how they “approach the writing task (p. 3). Based on some studies carried out on college writers, Irvin also posits that the success on writing depends on the representation the writer has of the writing task. This suggests that when writers start their process of writing, they need to have a clear idea of what they are going to write avoiding confusions or misconceptions. Irvin says that successful academic writing in college requires some specific steps such as determining: the audience, the context or occasion, the message, the purpose and the genres to be used, for example the essay which is the most frequent type of genre. In college, academic writing is a way of evaluation that asks writers “to demonstrate knowledge and show proficiency with certain disciplinary skills of thinking, interpreting, and presenting” (Irvin, 2010, p. 8). For the purpose of reaching the aforementioned skills, writers need to do some research, which means they also need to be able to focus on a research project and they need to know how to keep track of the sources of information they find, which implies lots of work and time. Irvin also states that writing appropriately requires reading well and critically, which means writers need to make a differentiation between facts and opinions “recognizing biases and assumptions, and making inferences” (Irvin, 2010, p. 8). In addition, Irvin posits that when arguing for interpretations, the writer needs to be skillful enough to make the reader have the same inferences the writers has made (p. 8). This involves an organized and clear structure of the written production.

## **L2 Academic Writing**

As L1 writing, L2 academic writing has no definite rules to make a writer prolific, but it does have some specific regulations to guarantee a good communication in the academic world. L2 writing is a complex skill, since it requires more than the mere understanding of what writers want to convey to their readers. It needs organization in its own structure, accompanied by planning and verification in order to

communicate effectively. According to Ransdell and Barbier (2002), “L2 writing requires a sufficient level of lexical, syntactic and spelling knowledge in the target language in order to express ideas in a correct linguistic form” (p. 3). In accordance with Ransdell and Barbier (2002), there is complexity and “variable set of behaviours” that L2 writing encompasses as follows: linguistic, pedagogical and psycholinguistic approaches. Ransdell and Barbier state that such approaches together can foster a deeper understanding about L2 writing, since there have already been studies about this type of writing from the point of view of each of the three approaches separately. For these authors, there are “social and emotional factors” (p. 3) for L2 writing that are taken into consideration such as the learners’ goals, social interactions and motivation. Ransdell and Barbier (2002) argue that “written language in L2 is a specific mode of communication that requires new skills and may even lead to a fundamental reorganization of communicative competence.” (p. 3). This leads to writers to learn an acceptable lexical level, knowledge on the appropriate way of writing words and syntax in their L2 so as to have the adequate expression of ideas regarding the linguistic form. The aforementioned knowledge is necessarily complemented by some specific resources to obtain the correct way of writing such as “planning, transcription, and reviewing during the production” (Ransdell & Barbier, p. 3, 2002), which is a similar process carried out in L1.

Another type of writing, which has had an important and growing practice in the modern world, especially with the development of online platforms to carry out the production of texts with the collaboration of people, is collaborative writing. This type of writing encompasses more than the mere understanding of rules to convey messages. It encloses not only knowledge of writing, but also negotiation and interaction with others, that is, the capacity to construct written communication between two or more

people. In the following segment, collaborative writing will be conceptualized as an important aspect that frames this project.

### **Collaborative Writing**

According to Storch (2013) collaborative writing is defined as “the joint production or the co-authoring of a text by two or more writers” (p. 2), where they share responsibilities in order to reach the final product during the writing process.

Collaborative writing draws on the theoretical basis of social constructivism. According to Shin (2014), students develop their writing skills when they scaffold on other students who are more skillful on writing. However, this may bring some drawbacks when working together such as an unbalanced cooperation in the task or a production of a non-coherent text. In accordance with Topping and Stewart (1998), collaborative writing has a lot of relevance to students nowadays, since this type of writing task allows students to think and reflect before starting to respond to questions and ideas fostered among themselves. Collaborative writing encourages students to distribute their own time to use the available online materials so that they can contribute to the writing task and feel empowered to share their ideas.

### **Web 2.0 Tools**

To begin with, it is pertinent to establish some clear differences between the Web 2.0 and the Web 1.0 characteristics. According to Cormode and Krishnamurthy (2008), there are three main differences that separate these two types of Webs and they are: The technological, which refers to the scripting and the way technologies are presented to depict sites and allow users to interact. The structural, which is related to the design and purpose of sites. And the sociological that considers the concepts about groups and friends. However, these authors agree on a fundamental differentiation between Web 1.0 and Web 2.0. In the old Web, the creators were just a few, meaning

that most of the users acted like consumers of the web. Whereas in the second one, there is a possibility to be consumers and producers at the same time and at any moment, maximizing the possibilities for the creation of content.

McLoughlin and Lee (2007), defined Web 2.0 tools as “a second generation, or more personalised, communicative form of the World Wide Web that emphasises active participation, connectivity, collaboration and sharing of knowledge and ideas among users” (p. 664). Thus, the use of Web 2.0 tools involves people who are connected to the world whether they consume or produce what is in the web. This also suggests that people produce information in a collaborative way, negotiating terms and coming to an agreement to reach certain type of production that could be unfinished because it might be continuously changed depending on the objective. According to O’Reilly, web 2.0 tools “enable individuals to create, share, communicate, and collaborate on the web, regardless of geographical, temporal or technological skill constraints” (as cited in Hsu, Ching, & Grabawski, 2014, p. 747). This also implies the creation of teaching and learning communities that collaborate together aiming to specific objectives. All this, in turn, allows the emergence of various and new opportunities not only for learning but also for applying teaching techniques.

For the following section of the theoretical framework, it is pertinent to present some studies that have contributed to this research field, such as the integration of several online platforms to help EFL students develop the skills of writing and reading in different socio-cultural contexts.

One of these studies regarding the development of writing skills in L2 mediated by ICT tools, reports the positive impact students had by using ICT tools by integrating social networking services (SNSs) into the classroom to learn how to write in English as demonstrated in the research conducted by Melor et al. (2012). The results show some

benefits such as the strengthening of students' creative thinking skills and the cultivation of brainstorming abilities. Besides, through the interaction with ICT tools, students' can broaden their knowledge, build confidence with the L2, increase their motivation, improve their vocabulary, have access to large amount of information and be able to share it with their peers and teachers, and finally train their writing skills. It is important to stress that the contribution to this field on this matter has been scarce.

Herrera (2013) conducted a study where the implementation of Storybird aimed to contribute to the development of other styles of writing such as narrative texts through collaborative writing. This researcher reported results such as the improvement of vocabulary, the use of more complex grammatical structures, and the boost of motivation and autonomy towards the writing process when using this tool.

A study conducted by Suárez et al. (2015) on the development of reading and writing in children showed that the use of ICT and educational open resources foster reading and writing increasing their development for academic processes. They concluded that through these tools, the learning spheres triggered and allowed the students to use writing as a means to express their thoughts and ideas showing their satisfaction, contributing to the achievement of objectives that are planned beforehand. They also concluded that the strengthening of reading and writing through ICT helps learners discover new worlds and ways to see knowledge allowing them to see new perspectives of sociocultural interactions.

Another study conducted by Åberg, et al. (2016), who developed a project called Scientific process – Teacher education program, S-TEP which was created to help some students to write their undergraduate theses, reported the following particularities: students have unlimited access to the website, meaning they can visit it as many times as they wish, students can access the website without time restrictions,

there are unlimited resources for students to access knowledge which includes multiple modes to search for that knowledge, and regarding the design of the website, it offered friendly access to achieve knowledge.

In the Colombian context, important studies have been conducted on the field of ICT tools to develop writing in L2. For instance, a study conducted by Cuesta and Rincón (2010), which is about the use of e-portfolio dossier and the genre process approach to enhance “short story writing” within students in a public school, reports both significant improvements in these students’ written production and the emergence of these learners’ roles (such as builders, planners and reviewers) in their writing process. The researchers also reported the importance of these roles which helped the learners reflect on their own learning process and become critical thinkers and make better decisions. Another project carried out by Muñoz (2010), which focused on writing development in children of first grade, mediated by the use of instructional materials that were designed based on the model called “Structural Cognitive Modifiability” (SCM), suggests evolution in the development of cognitive skills of children. Findings also reveal that children become more creative writers when they need both to remember previous knowledge and to integrate L1 and L2 aspects. Another study conducted by Fontalvo and Ariza (2011) showed the benefits of integrating ICT tools into the academic writing teaching. In this research, a group of high school students explored several types of writing such as literary, expository and informative texts among others. The researchers of this study concluded that the critical and constructive use of ICT strengthens the writing which also fosters knowledge and cognitive development. This study reported improvement in autonomy and coherence as well as in the participants’ capability to use several sources of information effectively integrating them into their writing. Finally, the researchers observed the collaborative

work the participants had when interacting among themselves, sharing and accepting ideas in order to relate different concepts. And finally, a study carried out by Gómez and McDougald (2013) within some undergraduate students of an English education program, inquired into the importance of the role that feedback within peers played in the development or maintenance of writing coherence in the elaboration of non-fictional narrative blogs, reporting positive results on the matter.

It is appertaining to assert about the scarcity of these types of studies related to the particular area of interest of this project.



## **Setting**

The place where the study was carried out is a private bilingual school located in the South of the metropolitan area of the city of Medellín. This school has been offering the educational service for fifty years. An important aspect of this institution is the integration of two international programs to its curriculum: Cambridge International Examinations (CIE) and the International Baccalaureate (IB). The objectives of these affiliations are to internationalize the school, to reach high standards in education and to provide educational and professional advantages for these students.

## **Participants**

This research project was carried out with seven eleven grade students from a private institution located in the metropolitan area of the city of Medellín, Colombia. These students who averaged 18 years old had to acquire a B2 level in English proficiency at the end of the course, according to the Common European Framework of Reference for Languages. The problem leading this study is based on the necessity the participants had to fulfill their graduation request. All of them had to write compositions related to any English literary work which was compounded by a rationale introducing the assignment, and the writing task which was the development of the written text. For this part of the assignment, students needed to consider types of writing, audience, register, style and so on. Besides the aforementioned task, students needed to present an external assessment. They had to produce a piece of writing they were allowed to choose from some text types recommended by the IB. Of course, the two sections of this work followed certain regulations the students needed to comply with, such as writing with a strict focus on: content, organization, style and language, and most importantly, these writings had to be carried out in an L2, in this case English. Given this necessity, this research project intended to use ICT tools to help students in the

development of their writing skill. The participants were informed about the characteristics of this project in order to motivate them to be part of it. Such participants were selected based on their high English level, their willingness and abilities to write. Moreover, they complied with a high level of responsibility and discipline, which were important aspects for the development of this project. Finally, these students belong to a generation that is engaged in web 2.0 tools, therefore they were familiar with the utilization of emails, chats, blogs, wikis, etc.

## **Research Methodology**

This project that inquired about the impact that the implementation of some ICT tools had on the students' writing skill used some web 2.0 tools such as Google Docs, online dictionaries, blogs, wikis, etc., in order to help a group of EFL high school students develop academic writing skills in L2. In order to carry out this research project, a case study was implemented, due to the characteristics of this qualitative research. A case study is a research design that allows researchers to gather information from a person, a community, a context, a process, etc., in order to try to understand that particular case. Creswell (2007) defines case study as an approach used "to examine a case bounded in time and place, and look for contextual material time, from multiple sources of information to provide an in-depth picture of the case" (p.96). According to M. Gall, J. Gall and Borg, a case study research is defined as "the in-depth study of instances of a phenomenon in its natural context and from the perspective of the participants involved in the phenomenon" (as cited in Duff, 2008, p. 22). Bryman (2012) states that "a case study entails the detailed exploration of a specific case, which could be a community, organization, or person. But, once a case has been selected, a research method or research methods are needed to collect data" (p. 45). Such research methods can include interviews, collection of artifacts and / or participant observation. The purpose of the present study is well defined by Hancock and Algozzine as "to gain in-depth understanding of situations and meaning for those involved" (2006, p. 11) by using several sources of information such as interviews. For this particular research project, the case study design is considered as intrinsic. According to Hancock and Algozzine (2006), the intrinsic design is used when researchers "want to know more about a particular individual, group, event, or organization" (p. 32), and they are not

interested in “examining or creating general theories or in generalizing their findings to broader populations” (p. 32).

This type of study was implemented in order to obtain a profound understanding of the situation that the participants of this research experienced in common during this process. This is why a group of seven high school students aiming to achieve the diploma or the course IB certificate by writing some academic papers required by the school were asked to participate in this project, provided that the goal was to intend some progress in their writing skill mediated by some ICT tools. The aforementioned participants, selected as a purposive sample, are the unit of analysis of this study. A unit of analysis in a purposive sample is defined by Bryman as “a non-probability form of sampling. The researcher does not seek to sample research participants on a random basis” (p. 418), having a specific purpose when sampling such participants (which may include documents, people, organizations, etc.). Such purpose is “to sample cases/participants in a strategic way, so that those sampled are relevant to the research questions that are being posed” (Bryman, 2012, p. 418).

### **Data Collection**

All the data collection procedures used for this study intended to respond to the research question by providing details about the way each participant interacted with every tool they used, as well as gathering information of their perceptions. The instruments for data collection that were used in this project included: a mixed questionnaire, a focus group interview and students’ reflections. In addition to the aforementioned instruments, the students’ work was also observed by means of computer captured images and screen shots from the participants’ screens.

### **Mixed questionnaire.**

It combined open and closed format questions. It was applied before starting the study in order to determine the students' perceptions and knowledge towards the use of web 2.0 tools to support L2 learning (See appendix A).

### **Focus group interviews.**

They were implemented in order to gather the participants' perceptions about their interaction with the ICT tools taking into account negative and positive experiences about the process they had in regard to the study. These interviews were applied at the end of the study dividing the participants into two different groups. There was initially one single design of questions for the two groups, but as the interview was being held, an extra question emerged from the information provided by the participants of the second group of interviewees. (See appendix B).

### **Students' comments.**

Before each intervention session, the participants were asked to write some reflections. The objective was to express their perceptions of the use of the online tools they were applying during the development of their tasks. This implied to write about the difficulties and advantages they had when using the different online tools and also about the writing task.

### **Screenshots.**

The researcher also took computer pictures of the participants' screens where there was evidence about the way they were implementing the online tools for their tasks. There were images of their writing process, the interaction they had while working on the task, and the tools they used within the platform.

### **Screen recorded software.**

During the study, interactions between students and the online tools were recorded using the screen monitor where the researcher had access to every participant's task, so that he could gather information in charts and / or by reporting it in a narrative way. This information was only possible to obtain while the participants were using the platform selected by the teacher-researcher for them, that is, Google docs. In addition to the aforementioned collection instrument, a screen capturing software such as CamStudio was also used to record the online interactions. This software allows users to record screen videos and audio and to edit them in computers in order to create educational tutorials. This software is under the GNU General Public License which is a free public license that guarantees users the freedom to run and share the software. CamStudio is hosted in <http://camstudio.org/>.

### **Data Analysis**

Data were analyzed based upon the inductive approach, since a “case study tends to take an inductive approach to the relationship between theory and research” (Bryman, 2012, p. 69). This means that the raw data collected during the study were carefully analyzed in order to draw out theories and concepts that can gear to the answer of the research question (Bryman, 2012) through the findings. During the analysis process, some steps were taken into consideration in order to obtain the findings for this study: First, the transcriptions of the two focus group interviews were carefully typed in a Word document, then the students' comments typed in an online platform format were copied in a Word document in order to analyze that information at any moment, that is, without depending on the internet connection to access data. Also, the information of open questions provided in the questionnaire was digitalized, since its format was made physically, that is, some sheets were printed for the participants to answer. Then,

according to some steps suggested by Bryman (2012) a thematic analysis was conducted to examine and extract the main themes distinguished within the transcriptions, related to the research question. For this purpose, coding was used after reading the transcripts carefully and several times, which means that data were divided into parts to label them. After that, recurrences were searched reducing data and making it more manageable, for the further connection to the research question. Subsequently, the categories were formed by grouping the codes into four main categories: Impact on L2 academic writing mediated by ICT tools, peer-peer and peer-teacher interaction, efficiency, and motivation.

Finally, data from the following sources: the questionnaire, the two focus group interviews, and the students' comments were triangulated in order to guarantee the accuracy of the findings to reinforce trustworthiness, so that the consistency of the findings could be corroborated during the analysis process (Creswell, 2012). Regarding the ethical issues and the informed consent, as suggested by Creswell (2012), the participants were assured about their confidentiality during and after the study (See appendix C).

What follows is a description of the procedures carried out for the data collection process: There were four writing sessions proposed by the researcher for the participants to carry out, which required certain regulations in the format and in the genres. This means that for every writing assignment, the participants were asked to follow instructions regarding the structure for the specific text and the register of the writing according to the genre (essays, letters to editors, articles for magazines, etc.). The tasks were divided into individual and collaborative work. The collaborative work was split into three groups: one group of three people and two groups of two participants.

### **Description of the Writing Sessions.**

Students had four writing sessions where they were exposed to different types of writing tasks: First, a collaborative writing of a paragraph based on one of the chapters of a book previously selected for this task, second, an individual task based on one of the five themes (see session two) proposed to the participants, third, a collaborative creation of a wiki, also based on one of the five topics previously suggested to the participants, and finally, the elaboration of a collaborative or individual writing task, based on a specific theme previously selected for the participants. Beforehand, the participants were asked to create a document in Google docs and share it with the teacher-researcher. Besides, for every single task, the participants were given specific instructions on how to carry out their writing production, and they were also given some slight ideas of the use of the tools of the online platform.

### **The Intervention**

In this segment the intervention that was carried out is described, which consisted of the interaction between the participants and the online tools that were implemented for this purpose. The modalities of writing applied were individual and collaborative work developed in four working sessions.

#### **Session 1.**

In this first session, the participants were asked to work collaboratively with a clear objective of making them interact with some online tools through a platform, previously selected by the teacher for them. The participants were asked to carry out a creative writing text, whose purpose was to write an alternative end of the third chapter of the novel “Lord of the flies”, which is one of the tasks proposed by the IB organization in the creative writing skill. This material was chosen because this book is part of the school curriculum for the reading subject, thus the teacher-researcher wanted



to combine the intervention of this study with the regular language classes. To carry out this activity, the participants were given a segment of the story of the third chapter which needed to be complemented and finished. For this purpose, the participants shared roles during the writing process as follows: the group of three people decided to share responsibilities taking roles such as the student in charge of the introduction, other in charge of the core conflict, and the other in charge of the conclusion. In the groups of two participants, the roles were switched alternatively, although initially in one of these groups, one of the participants decided to write the whole text and the other agreed on making corrections or observations, switching roles eventually.

They were asked to read the passage carefully in order to understand the context, and identify the type of register of the writing used by its author in the novel. As this work was asked to be done collaboratively, some interactions with the tool and among peers could be seen. They used the platform of Google Docs where the most useful tools were at reach such as the comment tool, the highlighter, the internal chat, the spelling corrector and the charts (See appendix D). Such tools were used after a recommendation made by the teacher, without deep explanations of how to use them. The students were informed about the importance of the utilization of those tools in order to see their interaction with such tools during the writing process. The platform of Google Docs was selected since all of the students of this school are provided with a Gmail account, meaning they must use it daily for academic purposes. Students also utilized some online dictionaries they found on their own. In some cases, where doubts emerged about the instructions of the task, the participants were eager to interact with the teacher, in whose case, such interactions were carried out in English by the three groups. However, only one of them decided to carry out the interaction in Spanish when it was done within peers, provided that they claimed to feel more comfortable. In order

to understand the plot of the story, the participants needed to reread the original chapter so that they could start working on the outline they would later develop. In order to see the implementation of some of the tools displayed by the online platform, the participants used: different colors to distinguish the labor they selected within the elaboration of the paragraph, charts to organize the information of the outline, the highlighter to classify the unknown words, the comment tool to write the definitions of that vocabulary and to make observations among themselves, the spelling corrector, and the online dictionaries. The participants also used the internal chat of the platform in order to discuss the ideas of the plot. For this part of the elaboration, the participants took some time to discuss the plot of the paragraph, which led them to tell the story in their own words in order to comprehend better what they would write later. Therefore, they began typing their creative story in the chat to negotiate how they could understand the plot of the story and to agree on how long the extent of their writing would be, so that they could develop their writing (See appendix E).

## **Session 2.**

For this session, the participants were requested to work on a platform using the online tools it provided, whose objective was to see that interaction, and the impact of these tools on the type of writing they selected. For this task, the participants, received information in advance about how to elaborate this writing task. First, the teacher-researcher asked the participants to work individually, in order to see the interaction that each one of them would have with the different tools offered by the platform and to determine to what extent their writing skill would develop with the management of the platform. Then, the participants were apprised about the possibility they had if they wanted to interact with their teacher whenever they considered it necessary, or even with their other peers in case they felt the need to share their document. This task was

selected by the teacher-researcher for students taking into account the criteria determined by the IB organization, in terms of the external writing exam administered by it.

The participants were free to choose one of the following five themes: Cultural diversity which was about writing an article for a publication in a school magazine on minority languages, stating reasons on why and how those languages should be preserved. The other theme was customs and traditions, placing the writer in a hypothetical situation about a traditional dance he took part in. The writer had to post an entry in his blog describing that experience and stating his thoughts about it. The next theme was health, where a letter to the editor of a national newspaper had to be written. The writer needed to express his opinion about the fact that young people have health problems due to the huge amount of time they spent in front of the computer. Leisure was the other topic to be taken into consideration, where the writer was exposed to the fact that money is an important aspect for sports today. Therefore, the writer needed to write a speech for his classmates in order to state the negative aspects of that situation. Finally, science and technology was the last alternative for the students to choose. Here, the students were asked to write an email to a friend describing the recent advances they saw in an information technology fair they had attended to. The extension of the writing oscillated between 250 and 400 words, which was also based on the IB regulations. Once the participants selected the theme to be developed, they started using the online tools the same way as in the previous task, that is, they used the comment tool to make corrections or remind themselves about any remark, the spelling corrector, online dictionaries, and the internal chat with the teacher when doubts arose.

### **Session 3.**

In this session, the participants were asked to do a collaborative work on the

creation of a wiki. The groups were formed the same way as in the first session, that is, one group of three and two groups of two participants. They also needed to follow some instructions provided by the teacher-researcher as follows: The participants were asked to take roles for the elaboration of the writing production, making sure they would use different colors to be able to differentiate their part of the writing. The participants also needed to use the tools of the online platform whenever they needed them, but besides that, they also had to utilize some other web 2.0 tools, such as online dictionaries and wikis. The participants were suggested to have samples of wikis and replicate their design in the writing task, in case they did not know about the features of a site of this type. The topic the participants were required to develop was also taken from one of the themes proposed by the IB exams: Health, which is the discussion of problems that young people are having due to the fact they spend a lot of time on computers.

#### **Session 4.**

For this session, the participants were required to write a text for a general interest magazine whose editor encourages readers to contribute with articles entitled “The home shopping trend”. This task was taken from the textbook the students use for the English subject at school. The participants had the chance to work either individually or collaboratively, however they showed a preference to choose the collaborative work. This type of work demanded them to establish some roles within the task such as defining the part of the text they wanted to develop using a distinctive color to identify them, and utilizing several Web 2.0 tools when needing them. In order to carry out this article, the participants were also given some tasks that preceded it. Such tasks implied more work than what they had done in the previous tasks because they needed to answer some questions in advance. First, they analyzed the rubric in which the editor of a magazine proposed readers to contribute with articles about the trend of

shopping in homes. Then, they brainstormed ideas where some questions needed to be solved out, after that, they had to create the outline of their writing, and finally they had to proceed with their article writing it in a range of 250 and 300 words.

## **Findings**

This section of the report presents the findings which show how the study implementation contributed to answer to the research question: How may the use of ICT online tools help a group of EFL high school students develop academic writing skills? and it also presents the analysis of the data collected. The analysis of the answers provided by the participants in the focus group interviews, the students' comments and the questionnaire revealed recurrences that generated the findings below.

The first finding reveals a positive impact on L2 academic writing mediated by ICT tools. Students perceived improvement in their vocabulary and grammar. This finding presents evidence of the enhancement the participants claimed they had during this study. The second finding shows the interaction of the participants with some ICT tools, which based on the teacher-researcher's decision, encompassed collaborative work in order to see the impact on the interaction of peer-peer and peer-teacher, and also the use of multiple tools offered by the platform the participants worked in. This finding contains evidence on the procedure in which the participants interacted with their peers, and with their teacher through the online tools, and it also has evidence about the participants' perceptions on how this work was carried out through the implementation of the online tools. The third finding reveals the participants' management on the ICT tools in terms of efficiency and the optimization of their time, referring to the promptness the participants had as they worked in their writing tasks. This means, they spent less considerable amount of time and their texts presented a higher quality work as well. Finally, the last finding shows the impact motivation had on the participants when carrying out the writing tasks.

### **Positive Impact on L2 Academic Writing Mediated by ICT Tools**

Findings suggest that the implementation of ICT tools in academic writing had a

positive impact in the development of this skill in English. This finding reports some advance regarding the development of the language use in two fields: First, vocabulary and second, writing in regard to grammar and structures. Concerning vocabulary, the implementation of these tools allowed the participants to increase it, giving them the possibility to make their vocabulary more varied, since these EFL participants find difficult to use certain words they have not incorporated yet in their L2. They found very practical and useful the search of words through online tools such as synonyms, antonyms and linking expressions, among others. Therefore, they saw a great advantage when using these tools in order to avoid repetition of words, know the meaning of unknown vocabulary, so that they could comprehend the texts easily, and correct spelling in case there were mistakes. For instance, participant 01 said:

“Using the online tools helps me out to improve my vocabulary by making it wider by looking at words in online translators as well as conjunctions and phrases or connectors” (Taken verbatim from Focus group2).

This statement shows the positive impact the use of these online tools had when they were implemented for the writing skill to foster more variety of vocabulary in the English language. Moreover, the use of the tools was not only limited to the mere search and use of vocabulary, but it was also extended to the search and use of other types of words that were necessary in order to build up the proper structures that helped to develop cohesion and coherence of texts, such as in the case of the different conjugations of verbs. Regarding this issue, participant 01 stated that

“using this tools allowed me to search for similar meanings between words and some conjugation issues in seconds” (Taken verbatim from focus group 1).

This demonstrates that the vocabulary expansion concerning the variety of synonyms and the way verbs must be conjugated led to a faster elaboration of the text,

since the online tools would allow it.

Regarding writing improvement according to participants' perceptions, findings also report a positive impact on the development of grammar structures and fluency when writing. Participants claimed they had an important development in this skill as they were dealing with the writing sessions, and besides their learning process in their L2 improved with the use of the tools. Participant 05, referring to his improvement of language and learning process said:

“I feel that this type of work strategy was very helpful for my learning and enhancement of the English language” (Taken verbatim from focus group 1).

The statement above evidences a perception of a significant development in the writing skill as the participants were progressively advancing in the tasks. There was a perception of considerable help and improvement on the development of the writing skill in English by using the online tools. This is also shown in the following statement by participant 01:

“... as you are using these tools and you are getting familiar with them, you are optimizing the search of what you need, and you can use this in order to do a more fluent writing work in English” (On translation, focus group 1)

As a general perception, the participants felt they improved their writing level a lot by using the online tools, reaching a more fluent writing in English. Moreover, they claimed these tools helped them reinforce the structure of types of genres according to the purpose when they were asked to elaborate their writing.

Participant 02 (focus group 1), referring to the improvement of writing mediated by the online tools stated that:

“...they teach different techniques or rather, they help to reinforce certain writing techniques, such as an article, or a letter, or a mail... in a second language which



is English, something that is not easy, but despite that, these tools offer a lot of alternatives, for instance, in internet, one can look for the structure that any of those writings have, and one can also search for the proper words, the formal or informal style easily and all that stuff” (on translation).

This evidence shows that through the online tools, this participant saw lots of benefits regarding the different styles and structures of the texts they needed to find, and also in regard to the search of the proper words to be used. (See appendix D).

### **The Use of ICT Tools Fostered Interaction within Peer-Peer and Peer-Teacher through Collaborative Work**

The analysis of the data shows that the use of online tools fostered one way and two-way interaction between teacher and students, as they developed collaborative tasks. The tools, as demonstrated further on, acted as facilitators of collaborative work and helped students to develop their tasks more quickly and more efficiently.

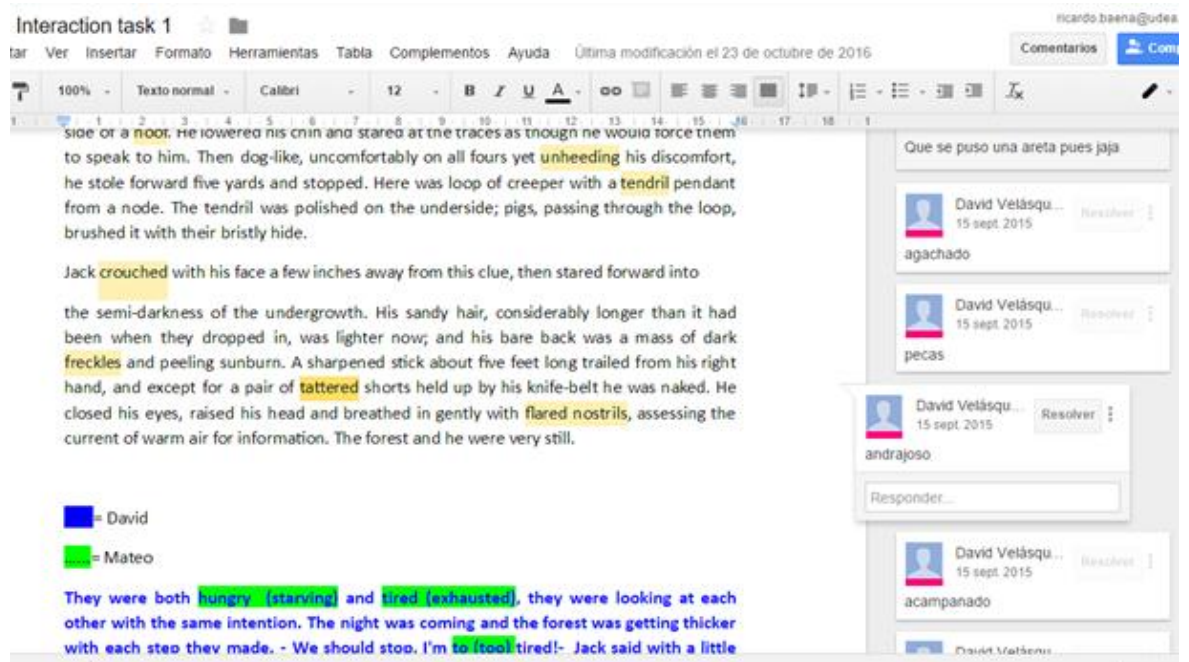
Concerning the impact on peer to peer interaction that was fostered by collaborative work, the participants expressed that their writing sessions allowed them to peer correct mistakes and discuss the issues that were pertinent to their writing task using the online tools. Therefore, the main benefits the students received from this interaction were peer support and peer help as they were writing.

Regarding the aforementioned explanation, evidence is presented according to participant 05 who said:

“Working in pairs was useful as it gave the chance to make the writing process faster, as well as better, because one could correct the other’s mistakes, and could discuss about the topic...” (Taken verbatim from focus group 1).

As the following screen capture illustrates participants worked collaboratively, first, by performing different roles in the writing tasks, and then, by using different tools

such as the text highlighter, the comment tool and the online dictionary among others.



**Figure 2. Peer to peer interaction.**

As figure 2 shows, the students in the group organized their work routine: one of them typed the original text of the paragraph and highlighted the unknown words to look for them later in the online dictionary. Then, he was ready to answer his classmate's doubts about vocabulary. The other student was in charge of typing the part of the paragraph that was needed to complete the story as the task required (See session 1, p. 29). Both participants took part in the development of this writing task by discussing on it in the internal chat of the platform. It is seen then, that these students worked collaboratively in their writing task sharing roles and responsibilities, and at the same time supporting each other's work. There is a similar study carried out by López (2006) where collaborative work inquires for negotiation and collaborative hypertext writing making students deal with textual, grammatical and pragmatic aspects overcoming difficulties presented during their working sessions.

Data on the impact of the peer to peer interaction suggest that participants could see improvement on their writing task when they did it collaboratively, changing their

perception that writing along with someone else is always a hard labor. This is corroborated by one of the participants, in the following comment:

“Working in pairs is not always easier, as we think different and have different beliefs, it let us create an open-minded text that could be read by anyone without no problem.” (Taken verbatim from focus group2).

This participant saw benefits about the ICT tools use after the work sessions, when he worked in collaboration with another peer demonstrating his satisfaction about the final writing production. He could see it was feasible to produce a collaborative text mediated by ICT tools that could be understood by someone else.

Participant 07 (focus group 2) stated that:

“...the same work done with my classmate is made easier a lot, therefore it is an impact... it is a very high and strong impact since online tools generate speed and agility when working on the document.” (On translation)

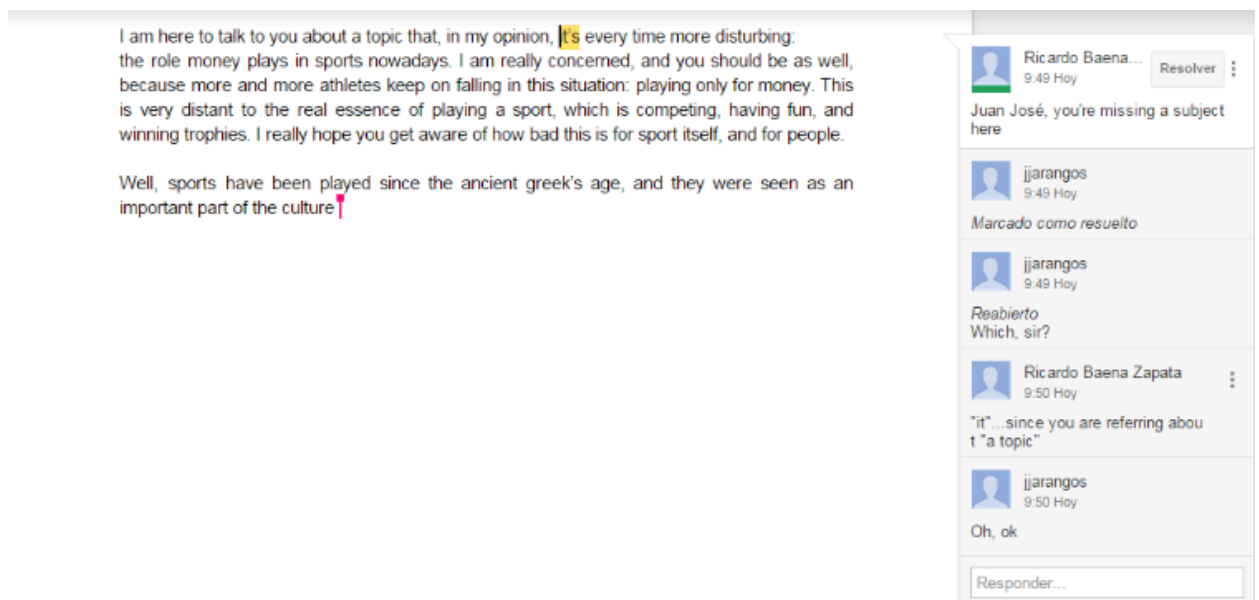
This shows the positive impact that writing collaboratively had when the participant used the online tools. He could witness the benefits of using them with a peer, regarding the writing simplicity and efficiency.

In relation to the collaborative work between peer and teacher, the participants perceived they had a good support when they could interact with the teacher for several purposes, that is, to ask questions about vocabulary, to report doubts about the tasks they needed to carry out or to ask for approval and feedback. The teacher’s help mediated by ICT tools was even considered as an asset when he gave feedback or reported comments on the students’ work because students felt that having the teacher’s assistance could make them progress and work faster in their writing tasks due to the prompt answers the teacher provided. Related to this issue, participant 05 said:

“Using interactive online tools such as Google docs allowed me to have a

support from the teacher, because I could ask him different things I needed to know, by the means of Google chat. Also, there is an advantage because the teacher can insert comments on the words or phrases that might need to be corrected. ” (Taken verbatim from focus group1).

As the following screen capture illustrates the interaction between one of the students and the teacher during the elaboration of one of the writing tasks.



**Figure 3. Peer-teacher interaction.**

In this particular case, the student sought for some support from the teacher by using the internal chat, finding an immediate answer that contributed to the elaboration of the text. It is evident then, that the interaction was very relevant during this process, since the student, who was the least knowledgeable agent in this case, relied on the teacher who was the most versatile person regarding the use of this online platform, the use of the English language and the pedagogical strategy to convey the teaching process, giving place to instant interaction with immediate responses. Consequently, it is important to mention that the TPACK or Technological, Pedagogical and Content knowledge was a very important aspect during this process because such approach postulates that there must be an effective integration of ICT into education, and more

precisely into language teaching. Therefore, the teacher researcher in charge of these sessions needed to integrate his teaching practices into the pieces of knowledge proposed in the TPACK, foundations stated by Mishra and Koehler (2006).

Findings also suggest that teacher's supervision during the writing work was also an important aspect for the students' development in this skill. The participants' felt they were accompanied during all the writing process, considering the fact they could receive comments and corrections at all times while they were working, that is, synchronously. As shown in the following evidence, the participant 03 said:

“It's so good because the teacher can watch me while I am working and can make some corrections and comments to improve my work.” (Taken verbatim from focus group1).

From the aforementioned comment, it can be said that the interaction with the online tools was of utmost importance during its implementation because it contributed to the improvement of writing.

In relation to the use of multiple tools, findings suggest that participants found them beneficial, since they could see multiple ways to use them to support their writing:

“The web 2.0 tools are very useful as they provide students with a wide range of opportunities to make a more accurate work, through dictionaries, translators, and all the tools google drive provides.” (Taken verbatim from focus group1).

This participant expressed his comfort when he used all the multiple tools the platform containing the online tools offered to him when he was writing his tasks.

### **The ICT Tool Management Fostered Efficiency**

In relation to the efficiency of the management of ICT tools, findings suggest that the participants considered the implementation of online tools on their writing work as very valuable because they reduced the amount of time they normally take when they

work with traditional writing tools (pen-paper). Evidence suggests that the participants were able to write without having to stop their work to search for information in other sources, besides they said these tools made their work easier in terms of brainstorming ideas, since the collaborative writing made this step simpler for them, that is, they could share their ideas instantly, and thus they could reply or take decisions about their information quickly. And finally, the aspect of time was associated with a better quality of writing, in view of the multiple online tools that the platform offered the participants which they were able to use during the writing process. Participant 02 said:

“In fact, even in the same platform that may be Google drive itself, for example... it allows the optimization of time and doing the writing faster ... and not only faster, but better I think. It’s not only about less amount of time, but also a higher quality.” (On translation).

Evidence suggests that the quality of writing was not only better, but more efficient, once the participants devoted less time when carrying out their tasks having the online tools at hand as it was stated by participant 03:

“These tools helped me a lot and allowed me to write the task not only in a better way, but also faster, because whenever I needed something, I just had to click somewhere on the screen”. (Taken verbatim from focus group1).

In regard to the efficiency of the management of these tools in comparison to the traditional writing process, the participant 03 posited:

“...comparing with the tasks one carries out by hand, when writing online one relieves of the burden of what is going to be written on a piece of paper using paper and pencil... that’s what is going to remain there and there is no chance to erase it and if it is erased, it will take long. Whereas, when one writes there, it’s much easier, much faster and one has more... so to speak... there are more ideas

coming to your head, because the task can be developed much faster and write things much quicker...one can erase them if there is any mistake, proofread... much easier than writing on paper.” (On translation, focus group 1)

### **Motivation Was Boosted by the ICT Tool Use**

Finally, findings suggest that participants were highly motivated during the writing process due to three main aspects: First, the learning process in their L2 with the online tool use, second, the benefits received with the use of the online tools, and third, the state of mind the participants experienced through this process. For the first aspect, some participants stated they had learnt a lot in their L2 regardless the fact they had a low or a high English level, and in the management of the online tools. During this process, they felt more eager to keep on working on their tasks, seeing the benefits they were receiving regarding knowledge and the progress they were making. Participant 04 (focus group 1) said:

“... I also consider that the effort was really worthwhile because during the whole work that was done, regardless the level one began with, a lot was learnt during these sections... from the social part, as working in groups, discussing about a task with the others, until the individual part about how to know to write better, how I put this full stop, these commas, how to write this... this was really an effort that was made but which reached a very specific objective that truly contributed to a second language, to a teamwork, and to an individual work as such in these specific tasks.” (On translation).

Regarding the aspect of the use of the online tools, participants saw the benefits of having all the possibilities such tools offered them, so they felt encouraged to instantly correct the possible mistakes due to the fact they were able to observe synchronously all the possible corrections that they needed to work on. Therefore, once

they received feedback, they felt enlivened to make the corrections. Participant 04 stated:

“Likewise, I think that in the current society which it is sometimes a bit complicated or difficult that people are motivated to look words up in a dictionary when they write on paper... those corrections that are shown in the platform, as my classmates said, and you see yourself involved, you feel the need to see what corrections have been made in the platform itself.” (Taken verbatim from focus group1)

This leads to a second aspect of motivation which is about having the possibility to become acquainted with the functions of every online tool the participants used, despite the fact they had already used some of those tools intuitively. Participants 02 (focus group 1) said:

“I think that the main motivation was to be able to become acquainted with these tools a bit more”. (On translation)

Participant 03 (focus group 1) said:

“Motivation was set on learning how to use tools that we knew about, but having just a general idea of their functions and usefulness”. (On translation)

Regarding the third aspect, the state of mind was affected positively since the participants felt that writing with the help of online tools was an enjoyable activity, and on top of that by the fact of getting to know and working with such tools was associated with a sense of happiness and high motivation, finding a source of inspiration, and foreseeing the usefulness for their future. Therefore, every time they were assigned a task to carry out, they thought of it as something fun, fostering the satisfaction of doing a good work, breaking down the barrier that writing normally brings with itself, that is, that writing is a dull activity. The following participant (06- focus group 2) reported:



“The impact I’ve felt, has been as a motivation impact, just like my partner said, because when you’re writing is much easier, so writing has become something enjoyable, and it isn’t a kind of punishment or an obligation, so when the teacher told us we had to do any kind of writing, it became fun... I mean, one feels motivated to work.” (On translation).

Regarding the familiarization with the tools, the participant 06 (focus group 2) said:

“... I felt very motivated, because as I mentioned it before, just the fact of getting to know these tools is very positive... this is, I mean, it’s going to be very useful to us in the future, and working on with the language has become rewarding, rather than a punishment or an obligation...” (On translation).

These findings suggest that motivation broke the paradigm of perceiving writing as a dull and difficult skill that is done just because it is mandatory.

## **Discussion**

This study inquired about the impact that ICT tools may have on the development of the academic writing skill of some EFL students. Drawing on the TPACK, the socio-cognitive approach and writing as a situated act, this section will focus on presenting the findings concerning the ICT mediation in the following aspects: Firstly, the help students received to develop their academic writing skill mediated by ICT, secondly, the students' interaction with their peers, their teacher, and the online tools, thirdly, the efficiency for the students' writing regarding the management of time, and lastly, the students' increasing motivation.

### **ICT Mediation Helped Students Develop Their Academic Writing Skills**

Regarding the language development of academic writing mediated by ICT, it shows development on vocabulary use and grammar structures. Such development was granted progressively as the participants were working on the different sessions of the writing tasks composed of varied genres in order to have the opportunity to generate some refinement on academic writing to a certain extent. Therefore, there are positive results from the interaction with the online tools in terms of variety of vocabulary, spelling, verb conjugations, linking words, and phrases that could be found and used for the different texts students had to elaborate. These various linguistic elements, which are comprised of: an acceptable level of spelling, syntactic and lexical knowledge are all required to express and convey messages in L2 writing, as stated by Ransdell and Barbier (2002).

In regard to the grammar development, findings revealed the importance of the use of online tools which allow the participants to develop different grammar structures and fluency as they were carrying out their writing. The implementation of the online tools facilitated some resources (Chats, charts, highlighters, comment tools, spelling

corrector, underlining tool, word counter tool) needed to achieve the correct approach to writing which has some basic procedures such as: planning, transcribing, and reviewing or proofreading during and after the production (Ransdell & Barbier, 2002). As there was progressive work and familiarization with the online tools, it was evident that the learning process of writing was developing, showing that the implementation of the online tools was an important support for the students. There is a similar study conducted by Fontalvo and Ariza (2011) reporting improvement in autonomy and coherence, and participants' capability to use several sources of information effectively integrating them into their writing. The participants of this study explored several types of writing (literary, expository and informative texts, etc.) where the critical and constructive use of ICT strengthened writing fostering knowledge and cognitive development.

### **ICT Mediation Helped Students Interact with Their Peers, Their Teacher, and the Multiple Online Tools**

One of the objectives of this study was to expose the participants to the use of the online tools in an interactional situation among peers and the teacher through collaborative writing. The efficiency in which writing was carried out exceeded the participants' expectations who gained confidence in writing because the working sessions with peers were faster, more practical, and easier compared to the traditional method, which implies an individual work using the traditional tools (paper and pen). Therefore, as a consequential benefit, there was a better writing process with the help of peers, which contributed to a positive change in the attitude and mindset of the students in relation to written work when conducted in pairs or groups.

Moreover, working collaboratively showed participants some benefits they had not foreseen when they undertook these writing sessions. Two of the benefits of having

their peers' support were about making corrections (of grammar, spelling, and vocabulary), and having discussions about the writing topics in order to contribute to their production that was being developed.

In this sense, co-authoring, the most important characteristic of collaborative writing, is evidenced. It is, according to Storch (2011), a writing production undertaken by two or more writers leading to social constructivism. In this study, participants were involved in social interaction because there was a thinking and reflection procedure before the elaboration of the text in order to respond and share ideas that were fostered among participants (Topping & Stewart, 1998). It is pertinent to state that all this interaction was mediated by online tools, whose utilization implied the students "active participation, connectivity, collaboration and sharing of knowledge and ideas among users" (McLoughlin & Lee, 2007p. 664).

However, the interaction was carried out not only between peers, but also between peers and teacher. In this aspect, some other benefits were evidenced, for instance, the constant support from the teacher who responded to the peers' doubts and who contributed to feedback whenever it was required. This fact led the participants to think that having the teacher's assistance and supervision through the online tools could help them enhance their writing work efficiently, considering they did not have to wait for a long period of time in order to receive comments or corrections as they were working synchronously. According to Shin (2014), when there is scaffolding on students who are more skillful than others in writing, they may develop this skill, although in this case the relation was peer-teacher. This means that the teacher was perceived as a knowledgeable agent who could make the peers feel confident about their work through the online interaction that was of great relevance because during the whole process, participants could see their development in the writing skill. The results

unveiled in this study coincide with previous findings from studies conducted in Colombia. A research conducted by Cuesta and Rincón (2010), shows similar results regarding students' written production in a collaborative work mediated by e-portfolio dossier and the genre process approach to enhance short story writing. This collaborative work fostered different learners' roles in order to elaborate their texts. The roles were also reported as important due to their usefulness for the learners of this study, provided that they became critical thinkers, made better decisions and helped them reflect about their own learning process. Some similar results were also reported in a study carried out by Gómez and McDougald (2013) inquiring into the importance of feedback within peers in the development or maintenance of writing coherence in order to carry out non-fictional narrative blogs.

### **ICT Mediation Helped Students Write More Efficiently**

The participants' writing development was also related to the utilization of the multiple tools offered by the platform, which were used for the writing sessions regarding the necessity. That is, participants were able to choose the proper tools so as to carry out the specific task they were engaged to do. Consequently, this capability of choosing the correct online tools without hesitation, also influenced the way the participants perceived them as friendly, intuitive, and agile, encouraging them to continue working with an intense pace avoiding interruptions during their work. This is why the use of the online tools was considered as very valuable because they helped to attenuate the amount of time which in traditional conditions, meaning the use of paper and pen, it takes much longer than with the use of these technological tools. Apart from that, all the sources of information are found instantly with just one click facilitating the progress and fostering better results in terms of writing, since there is more fluency and almost zero interruptions. Carrying out the writing process becomes easier because the

online tools provide confidence to the writer, in fact, if there is any mistake, it can be solved instantly, which is an advantage that the traditional tools do not provide. The use of these online tools also encourage students to explore more possibilities regarding the availability to access the tools that allow them to distribute their time more efficiently in order to contribute to the writing task. This use also helps students feel empowered and confident to share ideas with others, in case they work collaboratively. O'Reilly (2005) asserts that web 2.0 tools allow the individuals to work without constraints such as time or location, enabling them to collaborate, share or communicate with others. Similar benefits are reported in a study carried out by Åberg et al (2016) unveiling gains participants had when they integrated website tools into their writing process. Some of those benefits included the variety of resources they had in the web such as multiple modes to search information in a friendly environment, offering access to knowledge, and the availability to access the website without time restrictions.

### **ICT Mediation Helped Students Boost Motivation**

As an important aspect that helped students develop their writing skill, motivation is presented as a very valuable contribution. The benefits that are received while working with online tools encourage students to continue working on their writing texts, since they see a growing learning experience, regardless their initial English level. Students feel eager to reach higher writing levels, provided that they can continuously see that their writing difficulties can be overcome, gaining knowledge progressively, during both, the individual and the collaborative work. Motivation is also permeated by the instant access to online tools to receive feedback and make corrections without too much delay. This is due to high levels of engagement students feel when interacting with online tools, they are eager to respond immediately and see what is going to happen next. Moreover, students have the sensation that writing with these online tools

is enjoyable, inspirational and useful for their future performance. This sensation gives learners a high level of motivation, breaking the paradigm that writing is a dull and extremely difficult skill. In regard to the aforementioned statements, Ransdell and Barbier (2002) assert that motivation is influenced by the objectives of learners, their level of motivation, and the way they interact with the society. A similar result was reported in a study conducted by Herrera (2013) that aimed to contribute to the development of narrative texts through collaborative writing mediated by ICT tools. He reported the boost of motivation and autonomy towards the writing process, besides the improvement of vocabulary and grammar structures.

In this study, there was an incidental situation and a planned implementation regarding the students' writing process. First, due to the setting in which writing was carried out regarding the interactions, the environment, the prior knowledge and participants' writing assumptions, these writers were involved in writing as a social act. It was clear that students did not work solitarily, they interacted with online tools, their peers, and their teacher in order to reach improvement in their writing process through the stages of observation, discussion, thinking, and reading in the execution of the writing sessions. And second, the implementation carried out in this study implied the integration of the TPACK approach into the teaching practices to enhance writing. Such approach considers the integration of the three pieces of knowledge, which are Content Knowledge, Pedagogical Knowledge, and Technological Knowledge. Since teachers must see technology as a powerful means to transform the teaching practices and the learning outcomes (Mishra & Koehler, 2006) in order to guide the processes, they need to develop this form of knowledge (TPACK).

As it was mentioned before, there are some studies that corroborate, as in the present research project, that there are valuable benefits that may contribute to the

development of L2 academic writing mediated by ICT tools. Such is the case of a study conducted by Melor et al. (2012) that shows some benefits, for instance, boost of students' motivation, improvement of their vocabulary and enhancement of their learning process.

To sum up, the implementation of ICT tools can contribute to the development of academic writing taking into account the aforementioned aspects that may affect the performance of the participants during the online implementation. Those aspects undoubtedly optimize the writing process making benefits visible for learners.

Finally, the next section of this study will bring closure to the paper addressing the problem, stating the significance to the field, and reporting its limitations. Then, some suggestions for further research will be mentioned.



## Conclusions

When implementing the ICT tools on writing, it is needed to take into consideration several aspects in order to have a positive effect on the development of writing, permeating areas that affect this process because it is not only about exposing learners to the tools, but also about having clear objectives in mind that can be achieved. For this purpose, educators that lead this type of process need to be knowledgeable agents, not only in the language field, but also in the content to be taught and in the technological area. The online tools will have advantages over the traditional tools, as long as there is an efficient use and administration of the resources.

In regard to the contribution of this study, it is clear that the implementation of the ICT tools in the teaching field is highly useful. The benefits are evident from the findings of this study, which have shown that the academic writing skill can be developed through ICT tools. However, to achieve this goal, it is absolutely necessary a preparation from part of teachers, who become the guidance during this teaching process based mainly on the three pieces of knowledge encompassed in the TPACK approach, provided that online tools will not do by themselves what educators must. Besides the aforementioned aspect, there are some other important elements that should be taken into account, such as time dedication and connectivity conditions.

Regarding the limitations of the study, there were two main issues that affected the development of the sessions in a continuous pace. First, there were time constraints, due to the many activities that were held during the academic year at this school, therefore, some work sessions had to be postponed generating some delays for the data collection of the study. As a consequence, less data were eventually gathered. And second, internet connection was also a difficulty because some moments were interrupted during the work sessions generating distractions and of course, some delay

to begin the next session. This situation made some participants detach momentarily from their tasks, making them take more time to focus on their writing work again.

As this research reports, students perceive that the use of ICT tools have a positive impact on the improvement of their academic writing skill. However, there is still much to do in this field. For instance, further research on the impact of ICT tools on academic writing should be done taking into consideration pre-tests and post-tests, different educational contexts, and two different groups of participants, one group using the traditional tools for academic writing and another one using ICT tools.

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## APPENDIX A: MIX QUESTIONNAIRE

The purpose of this survey is to collect valuable information about the participants in the project and their perceptions regarding the use of technology as a tool to support L2 learning. The information provided here will be kept anonymous and will be used for academic purposes only.

Name:			
Age:	15-16	16-17	18-19
Candidate for:	IB Diploma	IB Course	
English level according to CEFR:	B1	B2	C1

### Perceptions about Web 2.0 tools

- Are you acquainted with the use of some Web 2.0 tools for academic purposes such as blogs, wikis, forums, online dictionaries, word processors?

Yes \_\_\_\_\_ No \_\_\_\_\_

- Which of the following web 2.0 tools are you familiar with:

Blogs: \_\_\_\_\_

Wikis: \_\_\_\_\_

Virtual forums: \_\_\_\_\_

Online dictionaries: \_\_\_\_\_

Word processors: \_\_\_\_\_

Social networks: \_\_\_\_\_

Other: \_\_\_\_\_

- Which one do you use the most? Please, specify: \_\_\_\_\_

- What are your main purposes for accessing the web?

Looking for academic information: \_\_\_\_\_

Looking for information of your interest: \_\_\_\_\_

Chatting: \_\_\_\_\_

Playing video games: \_\_\_\_\_

Watching videos: \_\_\_\_\_

Other: \_\_\_\_\_

- How much time a day do you spend on the web from each of these places?

School: Between 0 - 30 min

Between 1 hour - 2 hours

Between 2 hours - 4hours  
Between 5 hours or longer

Home: Between 0 - 30 min  
Between 1 hour - 2 hours  
Between 2 hours - 4hours  
Between 5 hours or longer

6. Have you used collaborative writing platforms such as Google Drive for school purposes?  
Yes \_\_\_\_ No \_\_\_\_
7. Which of the following academic writing tasks have you ever developed?  
An argumentative essay \_\_\_\_\_  
A discursive essay \_\_\_\_\_  
An expository essay \_\_\_\_\_  
A book review \_\_\_\_\_  
A formal letter \_\_\_\_\_  
A summary \_\_\_\_\_  
A report \_\_\_\_\_  
A proposal \_\_\_\_\_  
Other: \_\_\_\_\_
8. How do you think collaborative writing platforms may be of use in your academic writing process? \_\_\_\_\_
9. Which advantages do you think the integration of ICT may have in your language learning process? \_\_\_\_\_
10. What kind of online activities would you like your teachers to propose for language learning?
-



## APPENDIX B: FOCUS GROUP INTERVIEWS

1. ¿De qué manera la utilización de las herramientas de escritura colaborativa les ha ayudado a mejorar su escritura en inglés? ¿Cuáles son sus percepciones o sus ideas sobre esto?
2. ¿Cuál ha sido el impacto que ha tenido el uso de las herramientas online que han implementado para sus escritos? Las herramientas se refieren a Google Docs, a diccionarios online, y todo lo que han utilizado en cuanto a...digamos resaltadores, comentarios, todas estas herramientas.
3. Hablemos ahora de las ventajas o desventajas que ustedes han visto en el uso de estas herramientas con respecto a escritura tradicional con lápiz y papel.
4. Bueno, en cuanto a la percepción que tienen ustedes de las herramientas online ¿Les gustó la herramienta?
5. Bueno, en cuanto al esfuerzo que se imprimió en este trabajo, ¿Creen ustedes que valió la pena el esfuerzo?
6. Bueno, hablemos ahora del grado de motivación de ustedes, ¿En qué grado se sintieron ustedes motivados para trabajar la escritura con estas herramientas online?
7. ¿Creen que el tiempo destinado al trabajo usando las herramientas online se compara al tiempo dedicado cuando no las usan? Es decir, con el método tradicional: lápiz y papel.
8. ¿Hasta qué punto creen que la actividad de escritura colaborativa con estas herramientas promueve o afecta la creatividad?
9. Bueno, finalmente: Si estuviera en ustedes escoger el método de trabajo de escritura, entre el tradicional y las herramientas online ¿Por cuál se irían o ustedes creen que puede haber una combinación o que es necesario una combinación de los dos?

APPENDIX C: CONSENT LETTER  
UNIVERSIDAD DE ANTIOQUIA

Escuela de Idiomas

Maestría en Enseñanza y Aprendizaje de Lenguas Extranjeras

**Formato de consentimiento de los participantes y código de ética**

**Título del estudio:**

Implementation of ICT tools to help EFL students enhance academic writing in EFL context.

**Investigador en formación:**

Ricardo Baena Zapata. Teléfono: 300 750 6549 (Colombia)

Juan Rodrigo Bedoya.

**DESCRIPCIÓN DE LA INVESTIGACIÓN:**

Usted ha sido invitado(a) a participar en un micro-estudio sobre la Implementación de las herramientas Web 2.0 para ayudar a los estudiantes de inglés como lengua extranjera a mejorar la escritura académica en un trabajo colaborativo e individual. Este estudio se lleva a cabo como requisito de grado dentro de la Maestría en Enseñanza y Aprendizaje de Lenguas Extranjeras de la Universidad de Antioquia,” y lo hacemos con propósitos académicos, formativos, y de publicar los hallazgos en un futuro para contribuir a la academia.

Usted ha sido seleccionado(a) porque como actor educativo nos puede proveer de información valiosa.

Los participantes en este estudio incluyen estudiantes del grado 11 candidatos a diploma y/o a certificado BI.

Esta investigación se llevará a cabo en el colegio bilingüe Gimnasio Los Alcázares.

Los datos que se recogerán en este estudio incluyen: grabaciones de audio, observaciones a través de herramientas de web 2.0, cuestionarios y entrevistas. Sólo los investigadores tendrán acceso a la información que usted brinde.

**¿QUÉ IMPLICA MI PARTICIPACIÓN?**

Si decide participar en esta investigación, se le pedirá brindarnos una entrevista al principio, donde exploraremos asuntos relacionados con el conocimiento que tiene usted sobre escritura académica y las herramientas web 2.0. Luego, durante el proceso de investigación se harán dos entrevistas, con el fin de determinar las percepciones que usted tenga sobre las actividades realizadas y las herramientas usadas. Al final, se hará una entrevista grupal para determinar las percepciones sobre el proceso que se haya realizado. Su participación en las entrevistas será aproximadamente de 30 minutos a una hora.

**¿HAY ALGÚN BENEFICIO PARA MI?**

Se espera que el beneficio directo por tu participación en este estudio sea en materia de formación académica y de conocimiento de algunas herramientas web 2.0.

**¿CÓMO SE VA A PROTEGER MI CONFIDENCIALIDAD?**

En ningún caso su nombre será utilizado. En caso de ser necesario, y para ejercicios de clase, sólo mencionaremos características grupales de los participantes.

**¿A QUIÉN DEBO CONTACTAR SI TENGO PREGUNTAS?**

Puede hacer cualquier pregunta sobre este micro estudio cuando lo desee. Si después del día de hoy le surge alguna pregunta, puede contactar al investigador principal Ricardo Baena Zapata al 300 750 7549 o al teléfono 3054000 en el Gimnasio Los Alcázares. Correo electrónico: [rbaena@alcazares.edu.co](mailto:rbaena@alcazares.edu.co),. También puede contactar al asesor del proyecto Juan Rodrigo Bedoya en la oficina 12-206, Escuela de Idiomas, Universidad de Antioquia, o contactarlo en el teléfono 317 534 9104, o a su correo electrónico: [rodrigo.bedoya@udea.edu.co](mailto:rodrigo.bedoya@udea.edu.co) Él podrá proveerle información adicional.

Su participación es totalmente voluntaria. Si decide no participar o retirarse de este micro estudio, esto no tendrá ninguna implicación para usted.

Su firma indica que ha leído este formato, ha tenido la oportunidad de hacer preguntas sobre su participación en esta investigación, y voluntariamente acepta participar. Va a recibir una copia de este formato para sus registros.

Nombre del participante (En letra imprenta):

\_\_\_\_\_

Firma participante:

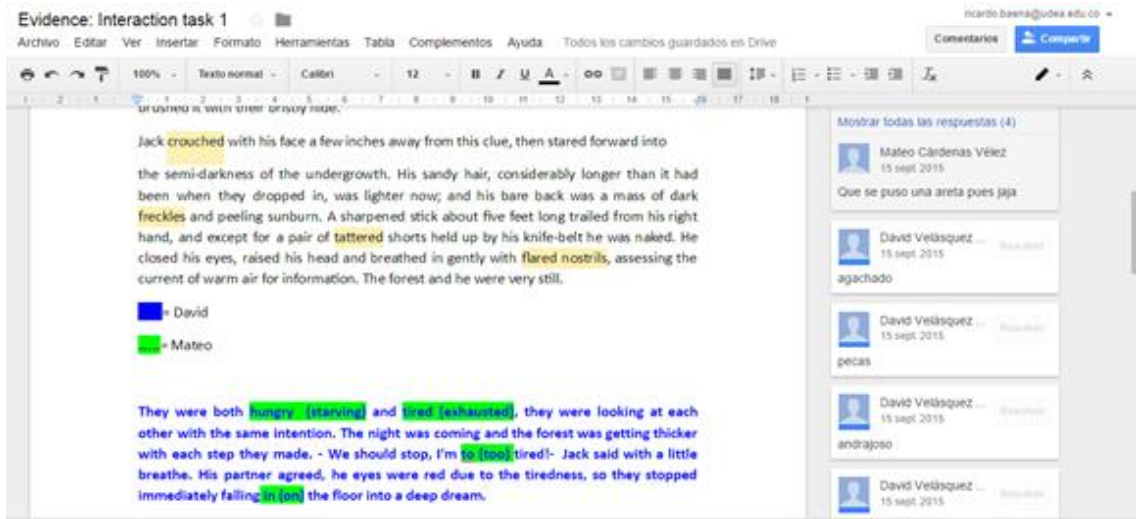
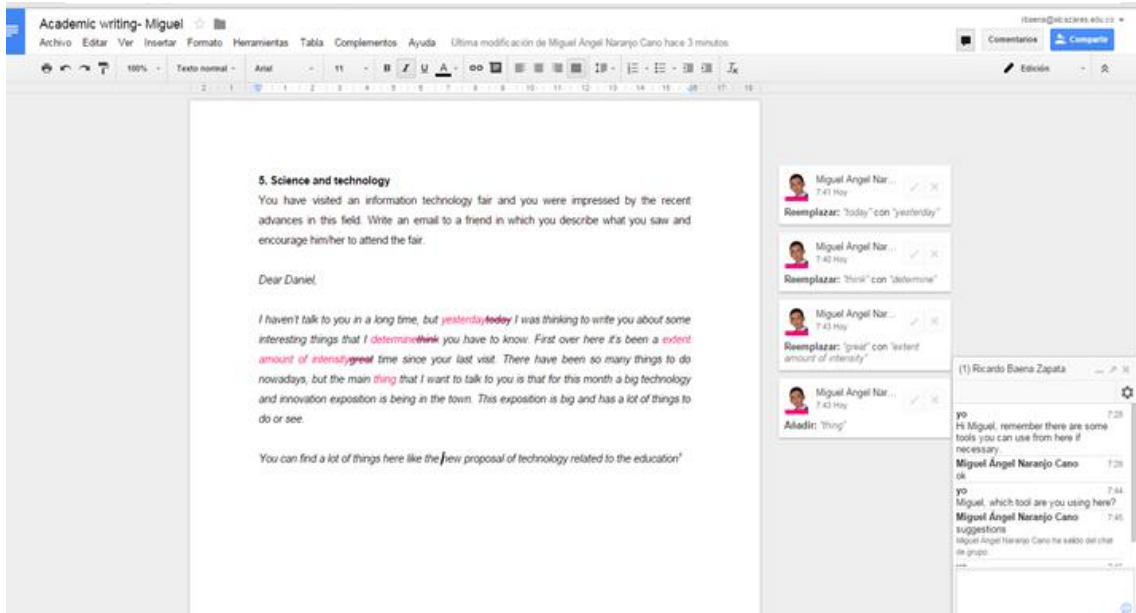
\_\_\_\_\_

Firma adulto responsable:

\_\_\_\_\_

Fecha: \_\_\_\_\_

## APPENDIX D: ONLINE TOOL USAGE



### Brainstorm

Jack is chasing pigs.

Everything is quiet.

He moves slowly seeing all around him.

He is seeking the trail the pigs did by finding all the clues

He starts to search very quiet for the pig.

He hear another rare and very different noise.

He found a big animal that he doesn't know or see in his life.

Animal very big with a giant nose and legs, the animal is a wild pig (wild boar). That beast start following him and he have to run for his life.

the chase ends by killing the wild pig.

the pig is killed by a bunch of kids hiding inside the jungle

Outline	
Introduction	<p>A brief description and interlacement between the fragment and our history:</p> <p>Jack is chasing pigs.  Everything is quiet.  He moves slowly seeing all around him.  he is seeking the trail the pigs did by finding all the clues  He starts to search quietly for the pig.</p>
Main Part	<p>What is happening and how the story will continue:</p> <p>He found a big animal that, he hasn't seen it in his life.  Animal quite big with giant nose and legs, the animal is a wild pig (wild boar). That beast start following him and he has to run for his life.</p>
Conclusion	<p>What happens at the end of this little part of the history:</p> <p>he chase ends by killing the wild pig.  the pig is killed by a bunch of kids hiding inside the jungle.</p>

APPENDIX E: CHAT INTERACTION TO DISCUSS WRITING

<b>Group 1:</b>	<b>Group 2:</b>	<b>Group 3:</b>
<p>Juan 9:34 Teacher please ignore those lines Now let's start I will type my paragraphs in blue And you?</p>	<p>Miguel Ángel Naranjo Cano 9:31 a. m. let's start What ideas do you understand of the text</p>	<p>David 10:50 podremos partir de una cita para la produccion? recuerda yo voy con el azul y vos con el verde, luego unificamos</p>
<p>Jacobo 9:34 In black?</p>	<p>Daniel Serna Angel 9:36 a. m. The main idea is a chase. Jack is chasing a bunch of pigs through the forest Ricardo Baena Zapata se unió al chat de grupo.</p>	<p>Mateo 10:50 Ok</p>
<p>Juan 9:35 that's too obvious; howe about red?</p>	<p>Miguel Ángel Naranjo Cano 9:37 a. m.</p>	<p>David 10:53 partimos de una introducción?</p>
<p>Jacobo 9:35 ok</p>	<p>I agree with you but how can we change this ending what ideas do you have. Ricardo Baena Zapata se unió al chat de grupo.</p>	<p>Mateo 10:54 Pero es que para escribir una historia como que no va la introducción</p>
<p>Juan José Arango Serrano 9:36 look, let's say, in our own words, what the part of the story is about</p>	<p>Miguel Ángel Naranjo Cano 9:44 a. m. Is better to don't mention the name of the animal to let the doubt to the reader</p>	<p>David Velásquez Martínez 10:54 igual partamos de una estructura ordenada para lograr coherencia</p>
<p>Jacobo Arango Montoya 9:36 ok</p>	<p>Daniel Serna Angel 9:44 a. m. the writing style of the author is very explicit, he mentions almost everything.</p>	<p>Mateo Cárdenas Vélez 10:54 Está bien. Buena idea</p>
<p>Juan José Arango Serrano 9:36 Jack is hunting And he's alone</p>	<p>Miguel Ángel Naranjo Cano 9:45 a. m. Ok</p>	<p>David Velásquez Martínez 10:55 hay palabras cuya definición creo que ambos no sabemos, busquemos primero eso</p>
<p>Jacobo Arango Montoya 9:39 He is looking for the trace of something</p>	<p>Daniel Serna Angel 9:48 a. m.</p>	<p>Mateo Cárdenas Vélez 10:56</p>

<p>Juan José Arango Serrano 9:40 Of a pig, maybe</p>	<p>we can't use a lot of information in the introduction, we need to be really brief since we're just writing one paragraph</p>	<p>ssi Sí* Pero cuál palabra por ejemplo</p>
<p>Jacobo Arango Montoya 9:42 How should we continue the thread of the story? Lets say, he could have followed the trail he found and could have arrived somewhere</p>	<p>Miguel Ángel Naranjo Cano  9:48 a. m. But all that we say in the introduction is repetitive so I think that we can resume it in one paragraph</p>	<p>David Velásquez Martínez 10:56 bent double  Mateo Cárdenas Vélez 10:57 Significa "doblado"</p>
<p>Juan José Arango Serrano 9:42 Could be; to what kind of place? a cave?</p>	<p>Daniel Serna Angel 9:49 a. m. but the whole writing assignment is one paragraph not the introduction</p>	<p>David Velásquez Martínez 10:58 busca tu las raras del primero y yo las del segundo</p>
<p>Jacobo 9:43 AM I guess to a hut, because the chapter is named "Huts on the beach"</p>	<p>Miguel Ángel Naranjo Cano  9:55 a. m. Do you want to start with the introduction or do you want me to do it.</p>	<p>Mateo Cárdenas Vélez 11:02 Vides no cantes tan duro porfa</p>
<p>Juan José Arango Serrano 9:43 AM It sounds clever</p>	<p>Daniel Serna Angel 9:56 a. m. i'll do it</p>	<p>David Velásquez Martínez 11:05 listas las definiciones=?</p>
<p>Jacobo 9:44 AM Ok, so lets start But what about hte alternative ending?</p>	<p>Miguel Ángel Naranjo Cano  9:57 a. m. so I do the main part meanwhile</p>	<p>Mateo Cárdenas Vélez 11:06 Sí Pasemos al siguiente paso</p>
<p>Juan José Arango Serrano 9:48 AM I think Ricardo said it wasn't necessary But we first have to make an outline remember</p>	<p>Daniel Serna Angel 9:57 a. m. ok.</p>	<p>David Velásquez Martínez 11:06 vamos ya a buscarle coherencia al parrafo para el ending  Mateo Cárdenas Vélez</p>

<p>Jacobo 9:48 AM ok</p> <p>Jacobo Arango Montoya 9:57 I guess jack could find the othr kids or a clue to get out of the isladn or sth Jacob Arango Montoya ha salido del chat de grupo. Juan José Arango Serrano ha salido del chat de grupo.</p>		<p>11:06 Está bien</p> <hr/> <p>David Velásquez Martínez 11:06 leamolo un par de veces</p> <hr/> <p>Mateo Cárdenas Vélez 11:06 5 minutos por leída En 10 seguimos hablando</p> <hr/> <p>David Velásquez Martínez 11:06 va David Velásquez Martínez 11:11 tenemos que continuar a partir de ese o podemos cortar parte del parrafo?</p> <hr/> <p>Mateo Cárdenas Vélez 11:11 Yo creo que debemos continuar de ahí</p> <hr/> <p>David Velásquez Martínez 11:11 va David Velásquez Martínez ha salido del chat de grupo. Mateo Cárdenas Vélez ha salido del chat de grupo.</p>
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