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The Use of Plotagon to Enhance the English Writing Skill in Secondary School Students

El uso de Plotagon para mejorar la habilidad de escritura en inglés en estudiantes de secundaria

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This paper reports on an action research study aimed at implementing *Plotagon* to enhance English writing skill. The study involved 18 students from 10th grade of a public secondary school in Colombia. The findings showed that the use of *Plotagon* promoted students' motivation to write through an interactive and attractive interphase to create digital stories. Consequently, students created their own digital story working in pairs and as a result increased their vocabulary, improved their English writing skill and other language skills. The data collection tools (surveys, tests, journals, observations, and dialogs as students' production) showed that *Plotagon* is a pedagogical tool that promotes students' English writing in a fun and meaningful way.

Key words: Digital story, English language learning, information and communications technologies, *Plotagon*, teenage learners, writing skill.

Este artículo versa sobre investigación acción orientada a la implementación de *Plotagon* para mejorar la habilidad de escritura en inglés. El estudio involucra 18 estudiantes de grado 10 de una escuela pública de secundaria en Colombia. Los hallazgos mostraron que el uso de *Plotagon* promovió la motivación de los estudiantes para escribir a través de una interfaz interactiva y atractiva para crear historias digitales. En consecuencia, los estudiantes crearon su propia historia digital trabajando en parejas y como resultado ellos incrementaron su vocabulario, mejoraron su habilidad de escritura en inglés y demás habilidades del lenguaje. Los instrumentos de recolección de datos (encuestas, pruebas, diarios, observaciones y diálogos como producción de los estudiantes) mostraron que *Plotagon* es una herramienta pedagógica que promueve la escritura en inglés de los estudiantes de una manera divertida y significativa.

Palabras clave: aprendices adolescentes, aprendizaje del inglés, habilidad de escritura, historias digitales, *Plotagon*, tecnologías de la información y comunicación.

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Introduction

With the advancement of technology, teachers have unlimited access to resources and tools to facilitate students' language learning. Hence, the use of information and communications technologies (ICTs) in language education has increased in the classrooms and many teachers use them as a supporting tool in language learning or as a means to motivate students. According to Yunus (2007), ICTs can be regarded as an important tool to enhance, for instance, the teaching of writing. Therefore, teachers need to be prepared to face the challenge to use ICT tools in schools.

This project intends to enhance students' English writing skill at a public secondary school in a rural area in Colombia. The main tool to achieve this objective is *Plotagon*, a software that allows students to create interactive digital stories collaboratively, based on the topics recommended in the *Estándares básicos de competencias en lenguas extranjeras: Inglés*[1] (Ministerio de Educación Nacional [MEN], 2006).

The study's leading research question is: To what extent does the use of *Plotagon* as a pedagogical tool help enhance the English writing skills of tenth-grade students? In that sense, we hope to show the advantages of *Plotagon* as an effective tool to facilitate the teaching of writing and give evidence of its positive effect on students' motivation and interaction. Thus, we expect that teachers may see this as an alternative ICT tool to explore and incorporate into their curricula.

Literature Review

Writing

As one of the four core language skills, writing is considered as a communication tool that involves such subskills as spelling, punctuation, and grammar (Harris, McKenzie, Fitzsimmons, & Turbill, 2003). Moreover, writing is a complex process that requires many skills: additionally, students also have to learn some concepts such as the rules to build a paragraph (Joko Saputro, 2013).

Brown (2001) says that "writing needs a process of thinking, drafting and revising that requires specialized skills" (p. 335). On the other hand, Al-Jumaily (2015) states that:

> Writing is the process of using symbols to communicate ideas. It is a system/method of representing language in visual or tactile form. Writing is the 4th language skill that learners need to work hard on to master. It's the mirror that reflects/shows one's knowledge about a language. (p. 29)

Similarly, Joko Saputro (2013) considers writing as a way to deliver what is in our minds. However, before doing that, we need to be aware of the proper text or genre to clearly convey our meaning.

Teaching Writing

According to Indriani (2015), in teaching writing it is necessary that the teacher explain in a clear way what kind of text students are going to write. In addition, teachers need to develop different materials and decide what media or tool to use to facilitate teaching/learning activities.

Gillespie and Graham (2011), in their article about evidence-based practices for teaching writing, explain some techniques that seem to work when teaching students to write. The authors note the complexity of the writing process in the sense that it demands a series of higher order cognitive skills. For that reason, teachers struggle to find effective methods to teach writing and, due to its complexities, most students would find writing both challenging and frustrating.

In this respect, Gillespie and Graham (2011) propose a series of recommendations based on different scientific studies in grades 4-12, in order to identify effective methods for teaching writing, some of those strategies relevant for our study are:

1 Guidelines for teaching English as foreign language given by the Ministry of Education in Colombia.

- Writing strategies: This consists of teaching students some strategies for improving their writing products which involve teaching general processes such as planning, revising, and editing.
- Collaborative writing: This strategy allows students to work together to write applying the steps for the writing process. Teachers here are expected to provide students with a well-defined cooperative writing framework where both individual and group work are properly assessed.
- Word processing: Promotes students to use a computer for completing written tasks. Students can access different tools to enhance their written compositions. In this case, teachers should ensure that students are familiar with the computer and the required software so as not to hinder autonomous work.

Collaborative Writing

This kind of writing involves two or more people working together to produce a written document (Nordquist, 2017). Similarly, Storch (2011) states that collaborative writing is "the joint production or the co-authoring of a text by more than two writers" (p. 275).

Furthermore, according to Fernández Dobao (2012), the benefits of collaborative writing include the production by students of more grammatically accurate pieces. In the same way, Koay (2017) points out that Vygostky's "sociocultural theory of learning suggests that collaborative writing allows group members to provide and receive peer support" (A Holistic View, para. 2).

Research on ICTs as Tools to Improve English Writing

Zakaria, Yunus, Nazri, and Shah (2016) identified students' experiences using the tool *Storybird* in writing English as a second language (ESL) narrative text. The population chosen for this research consisted of 15 students from a private university in Malaysia. The findings showed that most of the students had positive experiences using *Storybird* in writing a narrative text in English, evidenced by the fact that most of them were aware of the tendency to improve their vocabulary and the growing ability to write more complex structures.

Gregori-Signes (2014) collected and analyzed 50 samples of digital stories produced by L2 students at a secondary school in Valencia, Spain. The study showed that digital storytelling allows students to include and use ICT tools effectively; moreover, students can develop full awareness of the issue chosen for their story. In addition, digital storytelling can encourage critical thinking and self- and group-reflection. The evaluation of the tool was "positive since it allows the use of the social environment as an educational medium in and from which students learn" (p. 247).

Joko Saputro (2013) carried out an experimental study with eighth-graders at a high school in Indonesia. The participants were divided into two groups: experimental and control. The experimental group was taught using digital storytelling and the control group was taught using conventional techniques. Writing was measured by using an analytical method suggested by Brown and Bailey (as cited in Brown, 2000). The results showed that the mean of the experimental group was higher than that of the control group, that is, there was a meaningful difference in students' achievements between the two groups, in favor of the experimental one. As a conclusion of this research, the use of digital storytelling as a visual aid can improve students' mastery in writing narrative. It also showed how digital storytelling provided good support to the teaching-learning process.

Reyes Torres, Pich Ponce, and García Pastor (2012) analyzed the usefulness "of including digital storytelling within a didactic sequence in order to work on linguistic routines" (p. 3), for instance, greetings and leave-takings in EFL. The participants in this research were first-year students from the School of Education at Universidad de Valencia (Spain), divided into two groups of 30 students each. In order "to improve their

ability to adapt their language skill to specific situations within common daily interaction" (p. 5), the researchers designed a didactic sequence based on several workshops that were developed in class using the tool *Photo Story* 3. The results of this study showed in the final artefacts a clear improvement related to the use of linguistic routines, such as varied range of expressions and more complex structures used to start and end a conversation. Furthermore, students were able to create coherent stories that included a narrative and a dialogue. In addition, students were asked to send in their scripts before creating the videos in order to check out their progress as well as their use of grammar (Reyes Torres et al., 2012).

Quiroga and Toro Nieto (2015) carried out a collaborative action research which analyzed how the use of *GoAnimate* in cooperative work activities assisted participants in the development of their writing skill. In this study, 74 students from fourth and sixth grade with an A1 level at a public school in Bogotá, Colombia, participated. The findings revealed that cooperative work enhanced participants' writing skills as they increased their ability to work in groups while incorporating peer-assessment strategies. As a result, their writing productions showed improvements in terms of content, grammar, and vocabulary because *GoAnimate*, together with the cooperative work, helped students enhance their dialogic text by helping them increase their writing awareness.

The study by Herrera Ramirez (2013) showed how the use of collaborative writing through the tool *Storybird* promotes the creation of stories collaboratively; the research led two groups of learners to improve certain specific aspects of their writing skill. The first group had 15 students and the second one 10 students from the general English course at a language institute in Bogotá, Colombia. The findings showed that collaborative writing supported by *Storybird* encouraged students to create narrative texts; also, their positive attitude towards the production of stories increased. Furthermore, learners' vocabulary knowledge improved and attempts to use complex language forms to write their stories also increased.

It is important to clarify that in the local context where our study took place, no studies were found about the use of ICT tools to enhance the writing skill due to the limited access students have to technological appliances in this part of the country. For that reason, this research project is relevant in order to know how to apply or implement ICT tools to help students in a public institution to enhance their writing skill, in this case, by using the tool *Plotagon*.

Digital Story

This term emerged as a method used by community theatre workers to allow the recording, production, and dissemination of stories at the Center for Digital Storytelling in California in the late 1980s (Lambert, 2009). According to Normann (2011), a digital story is

> a short story, only 2-3 minutes long, where the personal element is highlighted, where the storyteller uses his own voice to tell his own story. The personal element is emphasised, and can be linked to other people, a place, an interest or to anything that will give the story a personal touch. (p. 125)

Even though there are different definitions of digital storytelling, most of them focus on the use of multimedia tools such as graphics, audio, video, and animation to tell a story (Smeda, Dakich, & Sharda, 2014). According to Benmayor (2008), digital storytelling is "a short multimedia story that combines voice, image, and music" (p. 202).

Digital story is considered an effective pedagogical tool that increases students' motivation and provides students "a learning environment conducive for story construction through collaboration, reflection and interpersonal communication. Students can use multimedia software tools as well as other technology skills to create digital stories based on given educational issues" (Smeda et al., 2014, Introduction section, para. 2).

Plotagon

Plotagon is a very intuitive content creation software (https://plotagon.com/) that can be used in education due to its text-based movie creation interface, as a storytelling tool for creating short or longer films. *Plotagon* has been an educational app that allows students to create instant animated videos. Students can create their own characters, choose scenes, write dialogs, and add emotions, sound effects, and actions. This software offers a free trial option for individual storytellers, a licensed version for students and educators, and another one for designers and professional users (Plotagon Education, n.d.).

According to Love (2013), *Plotagon* can produce animated movies from text dialogues. Its use in the classroom is practically endless; students can use it to write short scripts that can become movies as can be seen in Figure 1. Also, it can be used in different ways: for creative writing, report back situations (feedback), and to provide creative ways of adding to presentations. Besides, Love states that *Plotagon* is quite valuable pedagogically because it produces graphic output from a text-based input, which is useful for a foreign language classroom.

Method

This is an action research study, described by Lewis (as cited in Collins & Spiegel, 1995) "as a spiral of circles of research that each begin with a description of what is occurring in the 'field of action' followed by an action plan" (A Definition of Action Research, para. 1). Hopkins (1993) defined four cycles in an action research, which involves an action plan, action, evaluation, and reflection.

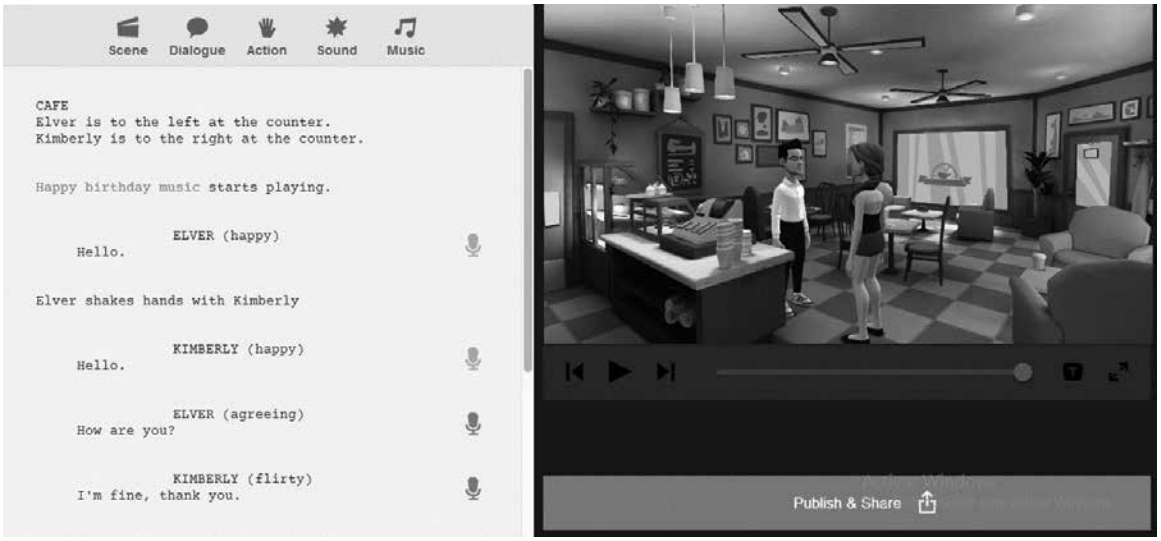
On the other hand, Tripp (2005) states that action research is mainly a strategy—for the development of teachers as researchers—used to improve their teaching and students' learning.

According to Richardson (1994), action research is a practical inquiry, which is conducted by practitioners or teachers in order to help them understand their students and their contexts. Teachers can observe the situations in the classroom, identify different problems, think about what and how to change, make changes, evaluate the impact of the changes on the situation, and start again.

Context and Participants

This research project was carried out at a public school located in a rural area in Colombia over 5 weeks

Figure 1. Digital Story Created by Students Using Plotagon



in 2017. The school offers three education levels: preschool, primary, and secondary.

The participants were 18 students (9 women, 9 men) who were in tenth grade with an age range from 15 to 17. The participants' English level is low mainly due to the lack of exposure to this language. Most of them come from remote schools that only offer up to the 9th grade and where there is usually just one teacher in charge of all subjects (which are taught in Spanish). With regard to their socioeconomic situation, most students' families have suffered displacement by different armed groups and most families receive help from the government through programs such as *Familias en Acción* (Families in action).[2] Despite the situation, the majority of them have the basic things or the materials they need such as school supplies and uniform. The school provides students breakfast and lunch.

Data Gathering Instruments

In order to gather the data for this study, the following instruments were used:

Surveys

Survey research is "the collection of information from a sample of individuals through their responses to questions" (Check & Schutt, 2012, p. 160). In this study, we designed and applied two surveys; the first one at the beginning, which had the purpose of understanding students' perception and expectations of the implementation of *Plotagon* to improve their writing skill. The second one performed at the end, in order to find out the students' progress and the effectiveness of the implementation of the tool.

Test

Tests are useful tools of research in the educational field. Marwat (2010) points out that tests are designed to describe and measure samples of aspects of human behavior. This study applied a pre-test at the beginning in order to know the students' initial English language proficiency and a post-test at the end to know the impact of the interventions. The tests consisted of a 67-item questionnaire divided into five skills: grammar, reading, listening, speaking, and writing. The final score was obtained by using a comparative chart.

Direct Observation

According to Tamayo y Tamayo (2011), this is a technique applied by the researcher to collect the data through observation; it involves selecting, watching, and recording the behavior and characteristics of the object under study. This process requires the use of different tools in order to gather data, such as recording, taking photographs, videotaping, and so on.

Students' Personal Journal

This instrument was used by all students involved in this research in order to reflect on their behavior, attitude, and the task itself during the classes by answering three simple questions related to their conclusion after performing each activity. Similarly, McDonough (1994) points out that journals are used to record mainly in a written way what is observed, perceived, felt, experienced, interpreted, and so on, after each class.

Students' Artefacts

In the research project, the scripts and digital stories developed by students during the interventions were treated as objects of investigation in this study.

Data Analysis

The data collected were analyzed, compared, and systematized in order to provide information on the students' production and opinions regarding the use of *Plotagon*. The purpose of this research was to use a pedagogical intervention to analyze the

2 Government program for families with low economic resources in order to subsidize children's education.

results obtained from the students' written production through the creation of digital stories with *Plotagon*. The research project, which lasted three months and three weeks, was carried out through the stages described next.

Stage 1: Introduction, Diagnostic, and Expectations

In this stage, we shared with the students some information about the research project, that is, objectives, expectations, and the commitment required by the students. Also, during this stage, we designed and applied a pre-test that included 67 questions classified by skill: grammar, listening, speaking, writing, and reading (it also involved some micro skills such as grammar and vocabulary) in order to know the participants' writing skill level.

Similarly, we arranged and applied a survey in order to know students' perception and expectations about the implementation of *Plotagon* in their English classes.

Stage 2: Execution of the Classes

During this stage, we considered the participants' needs, interests, and expectations before implementing *Plotagon*. A workshop was developed in order to teach students how to use the tool. After that, students wrote the scripts of the dialogs based on the following topics: sports and hobbies, environmental problems, social problems, and love and friendship. Students arranged in pairs to write their scripts (approximately 500 words). At the end of the interventions, they used *Plotagon* to type their scripts in order to convert them into digital stories. In total, students wrote 38 dialogs and implemented them in *Plotagon* during five interventions for five weeks. Students spent four hours per week writing the scripts in accordance with the given instructions and creating their dialogs using *Plotagon*. Next, we will describe the interventions conducted in this study.

First Intervention

In the first intervention, the purpose of the project was introduced to students. After that, the tool *Plotagon* was presented with the intention of familiarizing students with it. This intervention helped students understand the impact of the tool at first sight and got their attention, as well as encouraging them to improve their writing skill. After the explanation of the tool and its uses, an example of a dialog made in *Plotagon* was shown; then, students practiced on their computers working in pairs. They created two characters and a short dialog according to the given instructions. This intervention had a positive impact, because students evidenced in their dairies that they felt motivated, they liked the tool, and they enjoyed using it.

Second Intervention

In the second intervention, students were provided with the topic related to hobbies and sports. The vocabulary was introduced through a video; then, the structure of a dialog was explained. Students worked in pairs for 25 minutes writing the script of the dialog using the dictionary to look up unknown words. Students chose their classmates for this task. Some of the mistakes found in the students' writing were: word order, structure of questions, *ing* form, and lack of vocabulary. The interaction among students was good, although two pairs showed lack of interest at the beginning. After receiving feedback on the scripts, the students worked in *Plotagon*; they created the characters, chose the scenes, and typed the corrected script. The interaction with the tool was satisfactory because they learnt to use it quite fast with minimal difficulties. When they played their dialogs, students felt excited and motivated with their creations and practiced their listening skill at the same time.

Third Intervention

In this intervention, the vocabulary on environmental problems was introduced and students were shown a

set of slides in *PowerPoint* with different problems that are affecting the environment. Students identified with the topic because the school is agro-ecological and promotes environmental care and protection. In order to improve their writing, it was necessary to teach students how to punctuate a dialog through a sample video. To increase their vocabulary and background knowledge about the topic, students were given a reading about environmental problems in Colombia. In this intervention, students worked in pairs for 75 minutes; most of them focused their scripts on the environmental problem in the school, and in their dairies, the participants registered their interest in the topic and the importance of pondering on this kind of issues. The common mistakes in their writings were: use of auxiliary verbs and structure of questions. Due to the time given, students experienced more writing production and increased the amount of written words.

On the other hand, students showed their social skills working in pairs and supporting each other when they needed it. After their scripts were corrected, they created their digital stories using *Plotagon*. Students had fun during the creation of their characters, choice of scenes and actions to make the dialog more interesting. Most students registered in their dairies how comfortable they felt when using the tool and they were more satisfied with their writing process because they were improving.

Fourth Intervention

During the fourth intervention, students wrote their scripts about social problems. This vocabulary was introduced through pictures related to the topic and students had to guess what social problems were presented; then, students were shown a short description of the problem and instructed to correct and actively guess the words. Afterward, they read a dialog about poverty as an example of a social problem. In this intervention most students worked in pairs and had 60 minutes to write the script. In this process, most of them made fewer mistakes and increased their written productions; however, some pairs' performance went down because the given topic had many unknown words for them, and this made their ideas not flow as in the previous topics. It is important to highlight that students learnt to use the tool easily; when they typed the scripts, they could play and see their character and listen to the pronunciation. They concentrated on their dialogs and added actions to their characters and, in some cases, added music according to the scene, showing expertise in the use of the tool.

Fifth Intervention

In the last intervention, the topic was provided by students in the first survey; they wanted to write about love and friendship. The vocabulary was presented through the song "Count on Me" by Bruno Mars. Students felt motivated singing the song and they learnt the chorus easily. Then, a list of expressions and words related to the topic was given to students to use in their scripts. During this intervention, students had 75 minutes to write their dialogs, taking into account all the tips and resources given in the previous interventions. The scripts had few mistakes, evidencing a great advance in their writing production, but some students showed more progress than others. Students wrote more words in the second than first script. They enjoyed writing about this topic because, as they registered in their diaries, they identified with their daily life relationships. One of the students wrote: "I liked to be able to have fun with the program as it provides a great variety of actions so we can interact in a funny way". After having their scripts corrected, they typed it in *Plotagon*; they showed mastery in the use of the tool facilitating the implementation of this project. Every time students worked with the tool, they registered in their diaries they felt as if they were playing and at the same time learning. They liked the classes because they enjoyed using the tool and playing. It allowed them to develop their creativity. In addition, most students were engaged with the development of the project and they checked

their progress every class, which encouraged them to improve in each intervention.

Stage 3: Analysis and Report

In the last stage, we analyzed the data collected during the *Plotagon* interventions. The data were gathered in a journal, in which we wrote down what we perceived during the classes as well as observations. In addition, the students' artefacts were collected to analyze their progress and at the end of the interventions, we applied a post-test to compare the results with the pre-test.

Additionally, we applied a survey at the end of the process in order to evaluate the effectiveness of the tool and to improve students' writing skill. Finally, we analyzed the results and wrote the final report.

Findings and Discussion

In the first place, the findings showed a significant progress in students' written production, which was evident in their scripts (see Table 1), and in the way they communicated their ideas at the beginning and end of the interventions, involving other skills to write a dialog, such as grammar, vocabulary, punctuation, and spelling. In addition, the post-test corroborated that the whole group improved in the writing skill. Likewise, with each written production, students

Table 1. Number of Written Words Per Dialog

	First Script	Second Script	Third Script	Fourth Script
	Hobbies and Sports	Environmental Problems	Social Problems	Love and Friendship
Student 1	84	257	380	430
Student 2	143	375	484	527
Student 3	84	96	105	166
Student 4	60	107	178	117
Student 5	65	145	123	181
Student 6	92	96	103	155
Student 7	21	120	114	150
Student 8	45	88	101	150
Student 9	60	100	123	117
Student 10	92	152	170	217
Student 11	23	100	111	120
Student 12	21	152	105	217
Student 13	69	96	111	130
Student 14	23	77	111	181
Student 15	65	120	111	166
Student 16	143	120	114	130
Student 17	45	88	170	107
Student 18	23	77	103	181
Written Words	1158	2805	2817	3741
Time	25 min	75 min	60 min	75 min

increased their vocabulary using the new words and expressions given in each class. Bello (1997) argues that writing helps to increase language acquisition when a student puts across their ideas with words, sentences, and paragraphs in an assertive way, improving their vocabulary and grammar.

In general, Table 1 shows that the whole group started writing 1158 words and finished with 3741 words, showing about a 67% improvement in their written production. Detailed data show an increasing trend along the whole process that could be evidenced in a progressive rise of 1647 words from the first to the second paper and a slight growth of 12 words from the second to the third paper. In the last paper the number of words had a substantial increase of 924 words. On the other hand, at the end of the process one student achieved the goal of 500 words proposed at the beginning of the interventions. However, it is important to highlight that the whole group increased the length of their scripts thus improving their writing skill.

The students' written production reflected their context: most students wrote about their experiences related to the topics in each dialog. For instance, they mentioned some environmental problems in the school such as water pollution in the lake and some social problems, such as bullying and poverty in their municipality. In addition, some students based their scripts on their daily life, reflecting also their vocabulary knowledge in English. As mentioned above, writing allows us to express our way of thinking (Joko Saputro, 2013) and to demonstrate our language proficiency (Al-Jumaily, 2015).

The findings identified in the interventions, the students' and teachers' journal, and the final survey show that teaching writing in a foreign language is a complex process that requires teachers to find new ways to motivate and direct students' attention. For this reason, different strategies like brainstorming, model dialogs, and vocabulary flashcards were used during the interventions to teach writing and help students to enhance their written production. From those strategies, the ones that proved to be the most effective were the model dialogs and vocabulary flashcards because students felt more confident and had a higher written production in terms of words. Here, it is worth remembering those strategies that Gillespie and Graham (2011) propose to improve students' writing and which include general processes such as planning, revising, and editing.

The outcomes of the dialogs (students' final product), students' diaries, and final survey suggests that writing in pairs facilitated the writing process, and students shared their ideas and opinions to write their dialogs while learning from each other. As an example, one of the students said that he had learnt to work in a group, to do dialogs, use the program, and create new scenes; whereas another student stated that he had learnt to do a dialog using new vocabulary to express environmental problems with the modal verb *should*. In accordance with Gillespie and Graham (2011), collaborative writing is an effective technique that allows learners to work together to write, putting into practice the steps and instructions given for the writing process. This writing strategy helped students to provide peer feedback when one of the students did not know something or had doubts about vocabulary or grammar. Storch (2005) found that collaborative writing was a positive experience for most students and provided them the opportunity to gather their ideas and supply each other with feedback.

The use of ICT tools motivated and engaged students to write and learn English. Students also said that they had enjoyed themselves while performing the tasks suggested in *Plotagon*. In addition, they expressed that the use of technology in the English class promoted their interest in language learning. Similarly, the National Council for Curriculum and Assessment (https://www.ncca.ie/en) points out that the use of ICT in educational contexts increases the effectiveness of learning and is a motivational factor in students' learning. These findings are aligned with Yunus, Nordin, Salehi, Embi,

and Salehi (2013) about the advantage of using ICT in teaching ESL writing skill, through focusing "students' attention, facilitating students' learning process, helping to improve students' vocabulary, and promoting meaningful learning" (p. 4).

As a result of this project, students created 38 digital stories using *Plotagon*. The findings showed that students were able to use the tool in a short time, which they said in the final survey and was observed in each class. They felt excited about the final product since they were free to personalize their dialogs making them more creative because they could see their written production becoming a digital story. They could express their ideas and communicate their thoughts included in the created dialogs to which they added actions, sounds, and scenes in agreement with the concept of the digital story as a short multimedia story that combines different elements such as voice, image, and music (Benmayor, 2008). Moreover, students mentioned in their final survey that by creating the dialogs with the tool they could learn and improve their English through writing. As Smeda et al. (2014) said, students have the ability to use ICT tools aside from other technology skills to create digital stories taking into account the educational context.

The findings showed that *Plotagon* is an effective pedagogical tool that helps to improve students' writing skill which was evidenced in the post-test (see Table 2). During the interventions, the written productions (scripts), the product created in *Plotagon* (digital stories), and final survey, the whole group increased the length of their written production as well as their vocabulary,

Table 2. Results: Pre-Test vs Post-Test

	Grammar 20 Questions		**Reading** 20 Questions		**Listening** 14 Questions		**Writing** 12 Points		**Speaking** 15 Points	
	Pre	**Post**	**Pre**	**Post**	**Pre**	**Post**	**Pre**	**Post**	**Pre**	**Post**
Student 1	8	8	13	15	5	5	5	11	7	9
Student 2	11	13	10	11	9	10	9	11	10	13
Student 3	7	6	6	5	6	7	4	7	4	5
Student 4	4	7	8	6	4	6	0	7	4	7
Student 5	5	7	8	4	5	5	7	11	5	8
Student 6	6	7	8	2	6	6	0	9	0	5
Student 7	4	4	11	5	5	6	1	7	1	6
Student 8	7	8	11	11	4	8	1	7	5	5
Student 9	3	7	7	8	5	9	0	4	0	3
Student 10	4	4	4	7	2	7	9	11	6	10
Student 11	4	6	7	5	7	4	1	5	0	5
Student 12	4	5	4	3	6	6	0	6	0	4
Student 13	2	7	2	10	3	7	0	4	0	2
Student 14	7	7	8	9	7	5	0	6	4	5
Student 15	6	7	7	9	7	6	1	8	0	3
Student 16	6	5	8	8	5	6	5	7	5	8
Student 17	7	4	8	11	3	4	1	5	1	4
Student 18	1	6	1	8	3	3	0	4	0	4

grammar, and spelling. Besides, when students typed the dialogs in *Plotagon*, they could see how they become short animated movies, which engaged students and caught their attention while learning and having fun. According to Love (2013), *Plotagon* can be used as a very helpful pedagogical tool for second or foreign language classrooms because it can produce animated movies from text dialogs. Likewise, the findings in this research project could be compared with the study by Herrera Ramírez (2013) using *Storybird*, which is a tool with similar functions as *Plotagon*, where significant progress in learners' vocabulary was found along with the use of complex language to write stories; it also encouraged students to write and have a positive attitude towards writing.

According to the results shown in Table 2, students showed a slight growth in the tests scores. At the beginning, the average of right answers was 23, which showed 28% of the total amount of questions. After the post-test, the overall scores were a bit higher with an average of 33 right answers out of 81. It showed an increase of 0.7% compared to the first results. Therefore, after the implementation of the tool *Plotagon* the whole group showed some progress in their writing production. Nevertheless, it is notable that four students advanced more than others.

On the other hand, the findings showed that the use of *Plotagon* not only helped to enhance students' writing skill but also the students' ability to improve their listening and reading skill indirectly. When students played their dialogs, they could practice listening and reading the subtitles, providing opportunities for students to develop these skills as well. Findings showed that *Plotagon* is a valuable tool to promote writing and other foreign language skills through a learning environment supported by ICT. Similarly, Viatonu and Kayode (2012) state that the use of ICT enhances English language competence and using it in class can motivate bored students now provided with new ways to learn.

Limitations

The implementation of this action research project had three main limitations. The first one had to do with the students' English language difficulties such as lack of vocabulary, grammar, and punctuation problems. However, most of the students faced these difficulties in each class in order to reduce these language problems. The second limitation was related to technical problems with some students' computers where *Plotagon* could not run, but this inconvenience was solved through the lending of some computers from the school. The final limitation was that a few students did not like English, let alone writing in this language; nevertheless, students changed their minds, and felt motivated due to the activities developed in class, and the use of the tool awoke their interest in learning English.

Conclusions

The findings of this action research show the effectiveness of using *Plotagon* to improve students' writing skill through the creation of digital stories. In this study, the students' interest and likes were relevant, as well as their perception towards English. Those aspects were crucial in choosing appropriate activities to encourage them to achieve a better understanding during the interventions and make the most of the tool. On the other hand, identifying the students' English level allowed us to understand their language difficulties, and helped us to prepare and select specific teaching activities to improve English learning.

The implementation of *Plotagon* had a positive impact on students' English learning; the use of this kind of ICT tool increased students' motivation and helped to improve students' language skills, not only writing but also listening and reading. With regard to students' written production, most of them reflected their own experiences, what they live in their daily life at school, home, and with friends. Linked to this, English teaching must involve everyday life to be meaningful and "hook" students to the learning process. During

the implementation, the participants learned quickly how to use *Plotagon* and worked in pairs to write their scripts; it promoted social skills and provided each other feedback. Despite not everyone having computers at home; the use of ICT tools at school can scale down the technological gap between the city and rural areas. Finally, we conclude that the use of *Plotagon* encourages students to write and helps to increase students' written production; this is a helpful tool to facilitate English learning and each one of the language skills. Hence, we hope this research project will serve as base for future studies to provide teachers with a new tool to explore and implement the promotion of English language teaching.

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