Improving Writing through Collaboration Facilitated by Google Docs

Carlos Lenin Alvarez Llerena, caalvarezllerena@gmail.com

Guide: Tatiana Cozzarelli, tcozzarelliv@gmail.com

Author’s Note:

Abstract

Collaborative work through the implementation of Information and Communication Technologies (ICT) has changed educational settings by transforming old-style educational methods into technology-based teaching and learning practices. The purpose of this study was to analyze the effects of collaboration by applying technology to enhance students’ writing performance. This action research was based on surveys and interviews as methods of data collection and it was conducted on twenty-one EFL students from a public high school in Ecuador. The results indicate that collaboration has a positive impact on students’ writing skills and increased their motivation to work on writing texts. Finally, this study applies to English as a Foreign Language teachers who work in secondary education in private and public institutions as well as for teachers who love integrating new tech-tools in their pedagogical practices.

Keywords: Google Docs, secondary education, writing skills, collaborative learning
Resumen

El trabajo colaborativo a través de la implementación de las Tecnologías de la Información y la Comunicación (TIC) ha cambiado los entornos educativos al transformar los métodos educativos de estilos tradicionales en prácticas de enseñanza y aprendizaje basadas en la tecnología. El propósito de este estudio fue analizar los efectos del trabajo colaborativo mediante la aplicación de herramientas tecnológicas para mejorar las habilidades de escritura de los estudiantes. Esta investigación de acción se basó en encuestas y entrevistas como métodos de recopilación de datos y se realizó en veintiún estudiantes de inglés como lengua extranjera de una institución secundaria pública en Ecuador. Los resultados indican que el trabajo colaborativo tiene un impacto positivo en las habilidades de escritura de los estudiantes y aumenta su motivación para trabajar en textos escritos. Finalmente, este estudio se aplica a los profesores de inglés como lengua extranjera que trabajan en educación secundaria en instituciones privadas y públicas, así como a los maestros que aman integrar nuevas herramientas tecnológicas en sus prácticas pedagógicas.

Palabras clave: Google Docs, educación secundaria, habilidades de escritura, aprendizaje colaborativo
Improving Writing through Collaboration Facilitated by Google Docs

Nowadays, performing activities in collaborative activities has become a significant part of human beings’ lives. Working collaboratively has turned into an essential requisite for people in business, education, science, and health. Hence, the teaching-learning process in education has been transformed as well. On this matter, Hayes, González, and Alvarez (2017) indicated that education have transformed in order to focus on student-centered learning. Yilmaz (2017) posited that learner-centered instruction directs the learners’ attention to educational settings and focuses on learning outcomes in order to help develop students’ real-life abilities such as problem-solving skills and collaboration.

Moving past traditional education, the new Ecuadorian curriculum considers that the efficient use of Information and Communications Technology (ICT) enriches the competencies of students in the four English skills to facilitate organization, autonomy, and independence. Likewise, research by Alsubaie and Ashuraidah (2017) postulated that technology facilitates the teaching, learning, and assessment of the second language. The diverse online learning tools allow students to improve their English skills in a collaborative learning setting to organize information, edit, clarify ideas, share, and provide feedback according to their learning styles.

Consequently, current education is based on student-centered learning through the performance of hands-on assignments where students enhance their knowledge by integrating technology. Nowadays, there are a lot of technological applications to help English learners. Nisbet and Austin (2013) indicated that applying various tech-tools allows EFL students to expand their vocabulary and to increase their listening, reading, writing, and speaking in English.
The studies explained above have demonstrated the significance of connecting collaborative education and technology in the modern teaching-learning process. In order to explore this idea further, the innovation presented herein is based on the application of Google Docs to implement the learner-centered approach in a collaborative learning environment. Incidentally, upon examination of the existing literature about this topic, some benefits and drawbacks came to light regarding the incorporation of Google Docs for educational purposes, which demonstrates the need for research studies such as this one.

The significance of this study lies also in the fact that although there is a lot of information about the implementation of Google Docs as a technological resource in education, little has been reported in Ecuador. This research was conducted to investigate the impact of applying such technology to improve EFL learners’ English proficiency through collaborative writing skills. Currently, high school students need to acquire different competencies in order to achieve mutual objectives. The findings of this proposal could contribute to the learning process of English as Foreign Language of Ecuadorian high schools students.

This research discusses whether the students’ participation in collaborative writing through Google Docs could increase their writing skills and encourage them using this tech-tool for educational purposes. The questions that guided this study are:

1. Does collaborative writing improve when using Google Docs?
2. Does the use of Google Docs motivate students’ collaborative performance in their English writing activities?

**Literature Review**

At the time, English is an international language and the most spoken in the technological world. Therefore, it is imperative the integration of ICT in EFL
classrooms. The following theoretical support is divided into three sections related to the variables of this innovation.

**Collaborative Learning**

Camacho (2016) defined collaboration as a philosophy of interaction where individuals are responsible for their learning actions by respecting the abilities and contributions of their peers. Moreover, in education, research by Fakomogbon and Bolaji (2017) showed that “Collaborative learning is an approach employed by instructors to facilitate learning and improve learner’s performance” (p.268).

Similarly, local authorities established the significance of applying a collaborative learning in pedagogical practices in order to enhance students’ speaking and listening skills, as well as their reading and writing skills (Ministerio de Educación, 2016). According to Chen (2017), collaborative activities can promote second language learners’ academic progress and learning motivation by having more opportunities to practice their problem-solving, communication and social skills. Furthermore, Khatib and Meihami (2015) pointed out the importance of working collaboratively in EFL writing to have meaningful communication and to improve writing components such as content, organization, grammar, vocabulary, and mechanics.

Unfortunately, and in spite of the before mentioned findings, the reality in countries like Ecuador is quite different. Solano, Cabrera, Ulehlova, and Espinoza (2017) stated that Ecuadorian EFL teachers do not apply technological tools because they do not have enough facilities to incorporate technology in their pedagogical instructions. In relation to collaborative learning, Pang, Lau, Seah, Cheong, and Low (2018) claimed that there are social challenges, such as limited social interactions, gender bias, ICT reliance, and social norms conformance that could affect students’ performance in their educational assigned tasks. In this same way, Shahamant and Mede
(2016) argued that there are negative points about working collaboratively; some students may have concentration problems and some of them may not feel comfortable with the members assigned to their group. However, the researchers contend that groups need to be heterogeneous, purposefully and carefully chosen by the teacher.

**Collaborative Writing**

Before focusing on this skill, it is necessary to point out the significance of establishing how the writing process works. Abas and Abd (2016) explained the different stages involved in the writing process in order to write various types of texts efficiently. These stages are prewriting, planning, drafting, pausing, reading, revising, editing, and publishing. In the prewriting stage, the authors indicated that participants generate ideas about a specific topic. In the planning stage, participants check the ideas already generated and make sure they match the topic. Next, the drafting stage lets participants transform their ideas and planning into sentences. The pausing stage is a silent moment which helps participants examine what they have already written. The revising stage involves making changes to enhance the written text. In the editing stage, participants focus on sentence correctness. Finally, the publishing stage happens when the written text is ready to be shared with other people.

The skill of collaborative writing has been studied and defined from different points of view. Cho and Brutt-Griffler (2015) posited that collaborative writing is a relevant skill to acquire in the learning of any language. From a systemic perspective, Ferris and Hedgcock (2014) establish that writing is “a type of system that combines semiotic, communicative, cognitive, and creative functions” (p. 5).

In relation to collaborative writing, Elola (2010) indicated that it involves “two or more people working together to produce a document with group responsibility for the end product” (p. 51). The research by Challob, Bakar, and Latif (2016) emphasized
different collaborative writing skills that students must go through during the writing process. These skills involve constructing the meaning of the text to be written based on content, structure, organization, and language; sharing ideas with peers; and revising and providing feedback.

Vurdien (2012) pointed out the significance of integrating technological tools such as Google Docs and Blogs as a way of enhancing learners’ reflective and critical writing skills, as well as a means of fostering students’ writing sub-skills such as collaborative writing, providing peer-feedback reviews, individual knowledge construction, creating information, and sharing these materials in a critical and reflective manner.

From the technological perspective, there are several researchers who hypothesize the benefits of technology for second language learners. Blankenship and Margarella (2014) established the relationship between writing instruction and technology in the secondary classroom as a motivator to increase the amount of writing and allow students to give effective and efficient feedback through the instructional and assessment cycles.

Suwantarathip and Wichadee (2014) regarded Google Docs as a tool that enhances the writing process, stating that “Google Docs, a free web-based version of Microsoft Word, offers collaborative features which can be used to facilitate collaborative writing in a foreign language classroom” (p.148). Similarly, Kessler, Bikowski, and Boggs (2012) showed that students made planning, revising, and editing changes throughout the writing process because Google Docs seems to provide the flexibility to allow those writing steps. Zhou, Simpson, and Pinette (2012) suggested that Google Docs changes the students’ means of communication during collaborative
writing since they can work together and learn from the other members of the group by using internet and sharing ideas in a synchronous and asynchronous manner.

There are some limitations on collaborative writing in classrooms. Suwantarathip and Wichadee (2014) argued that, currently, the lack of time to read, to build partner relationships, and the lack of technology demonstrated that students are unable to interact efficiently. Even though collaborative writing is considered a great strategy to improve learners’ skills, it is necessary to have spaces where teachers can reinforce students’ tasks. On this matter, Soltanpour and Valizadeh (2018) pointed out the significance of teacher-learner interactions and face-to-face negotiation in order to reduce misunderstandings, errors, and mistakes with and by the students.

**Google Docs Apps**

Defining the nature and relevance of Google Docs is significant to different authors. Holzner (2009) stated that Google Docs have three familiar applications: as a word processor, a spreadsheet editor, and a presentation editor and viewer. These components are well known in Microsoft Office; hence, users can have them all together in a single place on Google Docs. Zhou, Simpson, and Pinette (2012) defined Google Docs as an online word processing application for collaborative learning. Regarding its use for educational purposes, Google Docs presents some benefits for stakeholders.

Graham (2013) posed that Google Docs creates a rich collaborative classroom environment where a document can be viewed, edited, and published by students or teachers. In the same way, Forment, Casany, Mayol, Piguillem, and Galanis (2012) explained the significance of Google Docs as an educational tool which allows learners to create and edit documents with different people from anywhere in a collaborative manner.
Regarding students’ motivation, Godzicki, Godzicki, Krofel, and Michaels (2013) established that Google Docs, as a technology-supported learning environment, helped EFL learners to become more motivated and engaged to learn. They also pointed out the significance of applying technology in the learning process as a tool to increase learners’ animated feelings and to be aware of the positive probabilities to use these kinds of tech-tools in their instructions.

Nevertheless, while these authors’ statements fit perfectly into the new educational paradigms by showing the significance of applying technology to improve education worldwide, in Ecuador, according to Solano, Cabrera, Ulehlova, and Espinoza (2017), technology is not commonly used in public schools or is not effectively applied due to the persistent lack of computers, internet, and technological devices.

Arguably, the limitations of using this kind of technology in education might also go a little further. Zhou, Simpson, and Pinette (2012) explained that students who cannot use Google features and operations become discouraged to incorporate Google Docs in their learning. Furthermore, Vallance, Towndrow, and Wiz (2010) presented two main arguments for the possible failure in the use of some online technologies for educational purposes. Firstly, they agreed that socio-dynamic problems between group members are often the reason for the lack of success of group work in collaborative spaces. Secondly, they mentioned that even when collaborative tools can facilitate interaction, not all individuals or groups automatically possess the knowledge, attitudes and sensibilities to work collaboratively. Consequently, researchers recommended that instructors provide detailed in-class demonstrations and examples to overcome Google Docs challenges.
Description of the Innovation

This innovation linked education and technology in order to enhance the collaborative writing skills of EFL learners. It aimed at improving collaborative writing skills facilitated by Google Docs to create an article for a travel magazine. The innovation was developed by applying the Backward Design Method where all activities, techniques, and strategies were set up after establishing the general objectives for this research (See Appendix A).

The innovation was applied in the following three phases. The first part consisted of writing a travel article as a group assignment without applying Google Docs; in the second part, the students worked in groups by applying Google Docs; and finally, in the third part, the students wrote the final product collaboratively in a shared document. They provided feedback, accepted comments, and worked together in the development of the post-performance task.

The implementation of this innovation lasted 36 classroom hours (40 minutes each). Before the innovation, participants had a 4-week introduction to the theme “Holidays”. They were asked to perform different activities to focus on the vocabulary and knowledge needed (travel vocabulary, parts and template of a travel magazine article, and touristic places in Ecuador) to start implementing the innovation.

The 21 students were arranged into seven groups of three. Each group had one hour to finish the pre-performance task by using one computer and their preferred text editor to write in general. In this case, they used Microsoft Word. Students of each group had to work together to accomplish the different criteria from the rubric (Appendix B).

After finishing the pre-performance task, students were introduced to Google Docs. They performed one assignment using this platform in order to become familiar
with this tech-tool and its main features. Students were instructed on how to create texts, type on this platform, edit texts, provide comments, and resolve comments by exploring its different features. Moreover, students noticed that by using Google Docs they could share their documents and that this platform automatically saves all of their changes.

Subsequently, students were taught about authentic feedback. They acquired significant knowledge about how to provide feedback when checking their peers’ documents. Group one had to check and provide feedback to the pre-performance task of group two; group two to group three, and so on. Students from each group had to provide authentic feedback by using the rubric and a different colored pen. Then, they gave the pre-performance task back to the original group and each group had to check the comments and feedback provided by their peers.

After that, students were asked to perform in one hour the post-performance task, in the same groups. One member of the group had to create the document and send the link to the other two members of the group. At home, they had to work in a collaborative manner to create and design the travel magazine article. When finishing this part, students shared their magazine article with another group; they received feedback from their classmates in order to enhance their final result based on the same rubric that was applied in both the initial and final performance tasks. The rubric was applied to grade four components: Ideas, Language Use, Layout-Headlines & Captions, and Final Product.

The last activity students had to do was to print their final performance-tasks and bring them to the school to present each touristic place in the magazine to the whole class using PowerPoint presentations. The final document was collected by the teacher to be graded and compared with the pre-performance task in order to determine the final
results of the study. To avoid subjectivity, two more teachers from the school were assigned to score students’ pre and post-performance tasks.

**Research Methodology**

The implementation of this action research began in October 2018 and it was developed in Azogues city, Ecuador at a public high school. The data was collected from pre- and post-questionnaires, pre- and post-performance tasks that were graded using a rubric.

**Participants**

The population of the high school is 1348 students, but in the class assigned there are twenty-one EFL learners (ages 15-16) who were preparing for the IB examination test. All the participants are native speakers of Spanish and most of them are at A2 English level according to the Common European Framework of Reference for Languages (CEFR). Results in a preliminary survey indicated that and most of them do not have any experience in the use of Google Docs as a tech-tool to learn.

According to the pre-survey (Appendix C), from the 21 participants, 7 were male and 14 female students. They are between 15 and 16 years old. Even though all of them have a Google account, only 23.8% of students had experience using Google Docs. Thus, 100% of participants think that applying technology is really productive for their English learning process. Most of the students indicated that technology helps them increase their speaking skills (71%), to improve their writing skills (95%), to enhance their reading abilities (85%), and to enhance their listening skills (76%).

Likewise, it is significant to point out that all students have applied different tech-tools to learn English. The most applied tech-tools to learn English reported by these participants are YouTube (60%) and Duo-lingo (30%) and to do their English homework is Google Translator (42.9%).
Instruments

The data collection process started on October 29th 2018 when students were asked to complete the pre-survey in order to know their general information and experience with Google Docs. It consisted of eight closed questions in Google Forms regarding the use of technology and its application for learning (see Appendix C).

A rubric was applied to evaluate the pre and post-performance tasks to answer the first research question: Does collaborative writing skills improve when using Google Docs? The rubric contains the following components: Ideas, Language Use, Layout, and Final Product. By using the rubric, it was obtained numerical data to compare the results from the two performance tasks (see Appendix B).

A post-survey was administered to answer the second research question: Does the use of Google Docs motivate students’ collaborative performance in their English writing activities? This survey provided evidence about students’ motivation to interact and collaborate in writing in shared documents (see Appendix D). It was developed by using Survey Monkey and it included ten Likert scale questions which students answered by choosing the best option according to the five scaled responses (1 = Strongly Disagree, 2= Disagree, 3= Neither agree nor disagree, 4= Agree, 5=Strongly Agree).

In order to show reliability from the post-survey, the Cronbach’s Alpha was calculated. The final result was 0.612 which mean that the reliability from this survey is minimally acceptable; thus, only the 61.2% of the variance in the scores is reliable.

Data Analysis

In order to analyze and interpret the data collected, the Statistics Package for the Social Studies SPSS was applied. Each criterion was assigned to different numbers and names in order to create variables to upload the information collected from each survey
in this software. After creating the tables with the variables assigned, the software was run on to get results from descriptive statistics such as maximum, minimum, mean and standard deviation. Moreover, reliability of the survey was given by the Cronbach’s Alpha of the data collected and already mentioned in a previous part of this study. Finally, in order to obtain histograms and graphical results, the tools form Survey Monkey and Doodle Forms were applied.

**Ethical Standards**

The implementation of this innovation involves some moral and social values. First, there was responsible conduct of this research with honesty, confidentiality, and respect for intellectual property. Furthermore, during the different phases of the study; namely: methodology, data collection, and analysis were addressed with objectivity in order to avoid bias from the teacher’s perspective towards students. Lastly, all the information obtained from this study was utilized by respecting institutional guidelines and laws. The participants of this research where named by codes; their participation and resources was acknowledged; and each contributor obtained their participation credit into the research.

**Results of the Study**

To answer research question number one “Does writing improve when using Google Docs collaboratively?” the results obtained from the pre and post-performance tasks are the following:

<table>
<thead>
<tr>
<th>Pair</th>
<th>PRE-PERF-TASK1</th>
<th>POST-PERF-TASK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>6.8571</td>
<td>10.5714</td>
</tr>
<tr>
<td>N</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.89974</td>
<td>1.13389</td>
</tr>
<tr>
<td>Std. Error Mean</td>
<td>0.34007</td>
<td>0.42857</td>
</tr>
</tbody>
</table>
Table 1 indicates that there were significant differences between the final scores between the pre-performance and the post-performance task respectively. The values indicate that there was an important increase in writing achievement.

The final values revealed an improvement in terms of language use, the cohesion of ideas, layout, and organization of the post-performance task. Regarding language use criteria, there was a total increment of 0.29 points between the pre and post-performance task (from 1.71 to 2 points over 3). In regards to the cohesion of ideas criteria, there was growth of 0.57 points between the two performances task (from 2.28 to 2.85 points over 3). Likewise, in terms of layout and organization, students showed an increment of 1.57 marks among the pre and post-performance task (from 1.28 to 2.85 points over 3). Hence, it was found that from the seven groups, all of the groups increased their final scores of 6.8 points to 10.5 points over 12 by applying Google Docs in a collaborative manner.

The effect size based on the results of the mean (M) and standard deviation (s) from the sample of seven groups of the pre and post-tasks provides a result of Cohen’s $d$ of 3.64. This indicates that the study has a large effect size, which means that the innovation has an impact in learning, but it cannot be generalized due to the small number of participants in this research.

Table 2

*Post-Survey Results*
To answer research question number two “Does the use of Google Docs motivate students’ collaborative performance in their English writing activities?” a post-survey was conducted in this study. After scrutiny, the results obtained from the Likert scale (Appendix D), 71.43% of students agreed and 28.57% strongly agreed they enjoyed using Google Docs to write the travel magazine article collaboratively and 61.90% of them stated that they will apply Google Docs to perform academic assignments in the future.

Similarly, 61.90% of students agreed and 23.81% strongly agreed that Google Docs is a useful tool for learning how to write magazine articles; while 52.38% of them strongly agreed with the criteria that by applying Google Docs they had the opportunity to learn some English grammar and mechanics by working collaboratively, sharing documents to be checked, and providing feedback based on rubrics. Furthermore, 42.86% strongly agreed and 42.86% agreed that they felt motivated when applying Google Docs in order to develop their performance task in a collaborative way.

To sum up, the findings showed that the seven groups of students performed very well in their post-performance task when applying Google Docs collaboratively with a
difference of four points. The majority of participants showed a positive attitude and motivation towards the integration of Google Docs in their collaborative writing activities. Finally, students stated their intention to continue to use Google Docs in future academic assignments as well as when they have to work in collaborative writing.

**Discussion**

The aforementioned results significantly show the potential benefits of integrating collaborative work in EFL educational settings to increase students’ English writing skills and motivation to perform different academic activities in their learning process. This statement is supported with others’ findings such as Zhou, Simpson and Domizi, 2012; and Suwantarathip and Wichadee 2014) who mentioned that Google Docs has significant benefits when EFL students work in groups to perform writing activities, mainly, outside the classroom.

In regards to the first question, the results indicated that although most of the students did not have experience with Google Docs, it helped them to successfully apply this ICT tool to work in a collaborative writing manner to develop their performance task. Results based on rubrics showed that when students worked in groups they obtained better scores than when they worked alone. Into the four criteria established on the rubric, students showed an increment in the scores based on their collaborative writing skills. Zhou, Simpson, and Pinette (2012) supported this statement, since according to their research Google Docs is an effective tool for collaborative learning and collaborative writing where students showed improvements in their learning experiences in comparison to performing assignments without using Google Docs.
According to the second research question, this study has shown that overall students agreed that they enjoyed and felt motivated when using Google Docs collaboratively. In addition, most students stated that they will apply this tech-tool to carry out academic assignments in other subjects. These findings are reinforced by Suwantarathip and Wichade (2014), who indicated that, based on their study, participants have positive perceptions towards Google Docs as a significant tech-tool for group collaboration on writing assignments. They explained that students have these positive perceptions because Google Docs is an easy ICT to use and it allows students to have real and authentic communication by sharing ideas and comments between them.

This study helps confirm some points similar to the previous research. According to the results, Google Docs is a technological tool that really helps students to improve their collaborative writing skills, as well as their correct language use while they write different texts. Also, students indicated they feel comfortable and motivated to write their travel magazine article and to improve it by receiving their classmates’ feedback in order to enhance their final documents.

On the other hand, during the implementation of this study, there were some inconvenient such as making groups to work together and the different technological skills that students have. These circumstances are pointed out by Shahamat and Mede (2016) who indicated two specific negative points when applying Google Docs: namely, the arrangement of the members of the group according to their different levels and when assigning roles to each member of the group, and the concentration problems that students show when working in groups in a synchronic manner.

Conclusions
This present research studied how students can improve their collaboratively writing skills by the support of Google Docs as a technological resource. It involved the comparison of documents that were developed by students the classroom, as well as online. The results show that collaborative writing helps students improve their writing skills in English by performing different performance tasks.

This study provides secondary EFL teachers with a significant overview of the benefits of integrating Google Docs in their classrooms. The result from the descriptive statistics indicated that participants had a significant improvement between the pre and post-performance tasks. This occurred since, in the pre-performance task, students did not have enough knowledge about how to write travel magazine articles as well as they use only one computer per group. In the post-performance task, participants learned how to write travel magazine articles and they could collaborate in their group by using Google Docs, providing feedback and accepting comments to improve their final product.

Furthermore, the post-performance task showed significant improvement in all groups, in all criteria from the rubric; namely, ideas, captions, layout, language use, and final product. Hence, results demonstrate that the collaborative work help participants to improve their documents by sharing their thoughts, interacting, and learning from one another.

Google Docs is a significant technological resource that helps and motivates students to improve their travel magazine article writing skills. Being an online resource, students could interact each other in a collaboratively manner to improve their travel magazine article. Therefore, it is necessary that EFL high school teachers include different collaborative activities where students can enhance their English skills.
EFL students have positive perspectives towards the application of Google Docs to perform different collaborative activities. The majority of student’s responses indicated that they enjoyed applying Google Docs while writing their performing task. They also indicated that they fell comfortable when receiving feedback from the other groups and finally they stated that they will apply this technological resource for future assignments.

**Limitations**

It is imperative to recognize and foresee the limitations when conducting this study. There are mainly based on: the students’ limited access to technology; the lack of school resources; little time to carry out the innovation; and teachers’ subjectivity.

First, the most significant challenge of applying this innovation, especially in public schools, is the lack of current technology. Some computers worked very slowly, and some of them had viruses. Likewise, the speed of the internet connection at the high school impeded incorporating Google Docs efficiently.

Some students reported that there were some inconveniences when using Google Docs due to the lack of knowledge of some features of this ICT tool. They indicated that even though they liked applying Google Docs for writing the article, it was little difficult to incorporate some characteristics in order to improve the design of the travel magazine article.

The last limitation is the number of participants from this study. The results obtained cannot be applied in a general perspective. Also, the result will may vary according to the ICT competencies that students have and their perspectives towards the implementation of technology in their academic assignments.

**Recommendations**
In order to strengthen reliability in future studies and to increment correlations between the items in the Likert scale, it is necessary to increase the number of items in the survey.

An interview must be administered to collect more factual information about students’ motivation and perceptions towards the use of Google Docs in their writing activities. This interview could be conducted to some members of the group; therefore, to have a better understanding of the innovation.

It is essential to work with current computers and with a fast internet connection to encourage students to invest their time in performing their collaborative writing activities and not in other technological issues such as checking internet connection or fixing computers’ items.

Finally, the innovation must have more hours of instruction in order to avoid student problems when applying Google Docs and its features as well as to develop different pre-activities to gain knowledge about the established topic.

References


Gozicki, L., Godzicki, N., Krofel, M., & Michaels, R. (2013). *Increasing Motivation and Engagement in Elementary and Middle School Students through Technology-

http://repositorio.unae.edu.ec/bitstream/123456789/285/1/Mamakuna%20N%C2%B05%20-%2054-64.pdf


https://scholarspace.manoa.hawaii.edu/bitstream/10125/44276/1/16_01_kesslerboggs.pdf

Ministerio de Educación (2016). English as a Foreign Language. Retrieved from:


---

**Appendix A**

**Lesson Plan**

**Name:** Carlos Lenin Alvarez Llerena

**Description of students:** 21 students from Juan Bautista Vásquez high school; A2 English level.

**Brief description of the subject:** This subject belongs to the International Baccalaureate Program (IB). It is called Language ab initio, which is designed to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where the language studied is spoken.

**Theme 4:** Experiences

**Topic:** Holidays; Festivals and Celebrations

**Total number of hours of the unit:** 36 classroom hours (40 minutes each)

---

**Stage 1: Desired Results**
## What students will learn:

At the end of the unit the students will be able to write a travel magazine article which talks about a touristic place in Ecuador.

## What do students need to know for that to happen?

<table>
<thead>
<tr>
<th>KNOWLEDGE</th>
<th>SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure of an travel magazine article</td>
<td>Write to the appropriate audience</td>
</tr>
<tr>
<td>Organization of a travel magazine article</td>
<td>Generate ideas that others want to read</td>
</tr>
<tr>
<td>Differentiate between the types of articles</td>
<td>Work in groups in a collaborative way</td>
</tr>
<tr>
<td>Know vocabulary related to tourism</td>
<td>Self-assess for accuracy</td>
</tr>
<tr>
<td>Use technology “Google Docs” for writing an article</td>
<td>Seek interesting topics to talk about</td>
</tr>
<tr>
<td></td>
<td>Share thoughts about specific topics confidently</td>
</tr>
<tr>
<td></td>
<td>Provide authentic feedback</td>
</tr>
<tr>
<td></td>
<td>Provide different touristic options in different places</td>
</tr>
</tbody>
</table>

### Stage 2: Evidence of having met Goals and Objectives

Students show their collaboration and article structure through:

- Self-assessing for accuracy.
- Seeking interesting topics.
- Writing to the appropriate audience.
- Generating ideas that others will want to join in.
- Using subject-agreements, verb tenses and word order correctly.

### AUTHENTIC PERFORMANCE

Students write a travel magazine article which talks about the three best touristic places in Ecuador

### OTHER EVIDENCES

GRASPS model: SELF ASSESSMENT AND REFLECTION
**Goal:** To promote touristic places to the correct audience purpose.

**Role:** Students are virtual tourist advisors.

**Audience:** People from all around the world who want to visit Ecuador.

**Situation:** You are a virtual tourist advisor. Your company asks you to write a travel magazine article about the three most important places to visit in Ecuador.

**Performance:** Work on a travel magazine article to promote the best three tourist places to visit in Ecuador. Also, provide general information and activities that people can do when visiting these places.

**Standards:**

- The text is organized.
- The text is grammatically correct.
- The text has a hook to draw tourist’s attention.
- The text follows the magazine article template

1) How do effective writers draw and hold their readers’ attention?

2) How does Google Docs help people work collaboratively?

3) Which characteristics can be analyzed in order to prioritize tourist destinations in the world?

4) How can I create the best ideas for travelers?

---

**Stage 3: What do students need to undergo to be able to do that?**

<table>
<thead>
<tr>
<th>Prewriting</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Day 1 Oct. 29th. 2018</strong></td>
<td><strong>40 min</strong></td>
</tr>
<tr>
<td>The teacher presents the theme Holidays as an introduction for the Unit</td>
<td><strong>5 min</strong></td>
</tr>
<tr>
<td>Students write down what the term Holidays means to them</td>
<td><strong>5 min</strong></td>
</tr>
<tr>
<td>Students perform a brainstorm about vocabulary words related to Holidays</td>
<td><strong>5 min</strong></td>
</tr>
<tr>
<td>Students share what they wrote with a partner</td>
<td><strong>5 min</strong></td>
</tr>
</tbody>
</table>
Students agree on a general definition of the term Holiday and write on the board after discussing it as a whole group  
10 min

The teacher provides students a definition from the dictionary and asks them to copy it and look up vocabulary they do not know from this definition  
5 min

Students complete a word-search activity using related vocabulary and look up unfamiliar words  
10 min

The teacher asks students to watch a video in their houses about a place they would love to visit in future holidays and answer the following questions:
- Why this place is worth visiting?
- What activities can you do there?
- What’s the weather like there?
- What’s the typical food like?

As homework, students have to fill in the pre-survey from:  
https://goo.gl/forms/53nTPU11ggkZeFRE3

<table>
<thead>
<tr>
<th>Day 2</th>
<th>80 min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students talk about the places they would love to visit in future holidays.</td>
<td>10 min</td>
</tr>
</tbody>
</table>

The teacher shows a PPT with the following questions and asks students to answer individually first, and then share their views with the rest of the class  
10 min

- What places do you consider visiting in Ecuador?
- What activities can you do there?
- What’s the weather like there?
- What’s the typical food like?

The teacher presents the “Amazing Things to Do” PPT and has students label the pictures therein  
10 min

Students listen twice to a dialogue between Beth and a travel agent and complete the conversation with words from previous exercises and the teacher provides feedback if needed  
15 min

The teacher presents specific vocabulary about holidays to students; PPT 8,9,10 while they perform some activities  
35 min

<table>
<thead>
<tr>
<th>Day 3</th>
<th>80 min</th>
</tr>
</thead>
</table>

The teacher provides students with a hand-out that describes the Iguazu Falls Vacations and asks them to fill in the gaps with the vocabulary they already learned  
40 min

Students create a concept map of the reading and summarize the most important information in groups and then they have to share with the class  
25 min
### Students determine if the statement on PPT 11 are F (facts) or O (opinions)  
**10 min**

### The teacher asks students to watch the following video at home about Ecuador and bring a written summary of the key points:  
[https://www.youtube.com/watch?v=r0_h9UK5fYs](https://www.youtube.com/watch?v=r0_h9UK5fYs)  
**5 min**

### Day 4  
**40 min**

#### Students share in groups what impacted them the most about the video  
**10 min**

#### Students, in pairs, complete a puzzle of the four regions in Ecuador and write what they see  
**10 min**

#### Students fill-in a DOTS Chart (Strategy to learn vocabulary) with the most important places to visit in Ecuador  
**10 min**

#### Individually, students label each corner of the DOTS chart with one region of Ecuador and then connect each place to the region it belongs to  
**10 min**

### Planning  
**80 min**

#### Students compare the different places that they wrote down on the DOTS chart in pairs and circle the three most important ones for them  
**10 min**

#### Students, in groups of three, construct a chart on a wallpaper base on the following model and fill out using the Internet  
**60 min**

<table>
<thead>
<tr>
<th>Place</th>
<th>Location</th>
<th>Cultural &amp; Sports Activities</th>
<th>Food &amp; Crafts</th>
<th>Interesting Facts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Day 5  
**80 min**

#### Students give an oral presentation of the places they have chosen (7 groups of 3; 5-8 min each)  
**60 min**

#### The teacher provides general feedback about the content of the presentations  
**15 min**
### Drafting

<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>The teacher requests students to read at home the following magazine article <a href="http://www.thetravelmagazine.net/zimbabwe-travel-guide-unmissable-places.html">http://www.thetravelmagazine.net/zimbabwe-travel-guide-unmissable-places.html</a></td>
<td>5 min</td>
</tr>
<tr>
<td>Students watch the following video about the 8 essential features of a magazine article <a href="https://www.youtube.com/watch?v=d1Arul39O4I">https://www.youtube.com/watch?v=d1Arul39O4I</a></td>
<td>10 min</td>
</tr>
<tr>
<td>Students circle the different parts of the article they read as they watch the video for a second time</td>
<td>10 min</td>
</tr>
<tr>
<td>Students create a mind-map of the major components of the article they read</td>
<td>10 min</td>
</tr>
<tr>
<td>The teacher requests students to bring their computers and their wall paper about the three places they chose to talk about in order to create their own magazine travel article</td>
<td>10 min</td>
</tr>
<tr>
<td><strong>Day 8</strong></td>
<td><strong>80</strong></td>
</tr>
<tr>
<td>Students, in groups, write their own travel magazine article about one place they selected including all the part of their mind maps using their computers and by using a rubric (Pre-Performance Activity)</td>
<td>80 min</td>
</tr>
<tr>
<td><strong>Day 9</strong></td>
<td><strong>80</strong></td>
</tr>
<tr>
<td>Students watch a video about providing authentic feedback, twice. <a href="https://www.youtube.com/watch?v=KNBU8Ny46jE">https://www.youtube.com/watch?v=KNBU8Ny46jE</a></td>
<td>10 min</td>
</tr>
</tbody>
</table>

### Reading

<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>The teacher plays the video while he stops it in the most important parts in order to let students take notes and learn how to provide effective feedback using the rubric</td>
<td>70 min</td>
</tr>
<tr>
<td><strong>Day 10</strong></td>
<td><strong>40</strong></td>
</tr>
<tr>
<td>Students read the articles already created by their classmates and provide them authentic feedback, based on the rubric of this innovation, in order to practice how to do it well</td>
<td>40 min</td>
</tr>
<tr>
<td><strong>Day 11</strong></td>
<td><strong>80</strong></td>
</tr>
<tr>
<td>The teacher collects each article and check student’s feedback. After that, the teacher provides more examples about how to provide authentic and effective feedback by showing students some examples</td>
<td>80 min</td>
</tr>
<tr>
<td><strong>Day 12</strong></td>
<td><strong>80</strong></td>
</tr>
</tbody>
</table>
The teacher presents the tech-tool to students by introducing them to “Google Docs”, and its most important features and how to apply them. 60 min

Students create a Gmail account (if they do not already have one) in order to use Google Docs 20 min

**Day 13**

40 min

Students open Google Docs and start exploring it by checking different features and tools that the teacher will share with them. 40 min

**Day 14**

80 min

Students practice using Google Docs by writing a letter to a teacher about his/her subject 60 min

Students share their letter with two classmates by showing them how to create a link 20 min

**Day 15**

80 min

Students practice providing authentic feedback on the letters by using the comment tool 80 min

**Day 16**

40 min

Students create pairs based on the similarity of the three places they chose and have them establish what they have in common 40 min

**Day 17**

80 min

Students, in their groups, write a travel magazine article using their computers, about the three places they selected combining the information they have in common 80 min

**Editing**

**Day 18**

80 min

The teacher asks students and their groups, to get together with another group-pair and share the link to each other’s article in order to provide an authentic feedback. Feedback will be based on the rubric 80 min

**Day 19**

40 min

Each group-pair selected goes into their document and accepts/refuses the corrections or observation that were made by the other pair according to their thoughts 40 min

**Publishing**

**Day 20**

80 min
In the original pairs, students edit the final version of the article using the rubric and improve the article's layout. Each pair will read aloud their article and then will send it to the teacher to be evaluated (Post-Performance Task)

<table>
<thead>
<tr>
<th>Day 21</th>
<th>80 min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receive final grade and discuss</td>
<td>80 min</td>
</tr>
</tbody>
</table>

As homework, students have to fill in the post-survey from: https://es.surveymonkey.com/r/LVFY9PP

### Appendix B

#### Rubric

#### Rubric for Travel Magazine Article

<table>
<thead>
<tr>
<th>Category</th>
<th>0 points</th>
<th>1 point</th>
<th>2 points</th>
<th>3 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideas</td>
<td>The article seems to be a collection of unrelated sentences. It is very difficult to figure out what the article is about.</td>
<td>Ideas are somewhat organized, but are not very clear. It takes more than one reading to figure out what the article is about.</td>
<td>Ideas are expressed in a pretty clear manner, but the organization could have been better.</td>
<td>Ideas are expressed in a clear and organized manner. It was easy to figure out what the article is about.</td>
</tr>
<tr>
<td>Language Use</td>
<td>A lot of grammatical mistakes or misspellings.</td>
<td>Some grammatical mistakes or misspellings.</td>
<td>A few grammatical mistakes or misspellings.</td>
<td>No grammatical mistakes or misspellings.</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------------------------</td>
<td>---------------------------------------------</td>
<td>---------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Layout-Headlines &amp; Captions</td>
<td>The article is missing bylines, does not have adequate headlines, or many graphics do not have captions.</td>
<td>The article has headlines that accurately describe the content. The article has a byline. Most graphics have captions.</td>
<td>The article has headlines that accurately describe the content. The article has a byline. All graphics have captions.</td>
<td>The article has headlines that capture the reader's attention and accurately describe the content. The article has a byline. All graphics have captions that adequately describe the places.</td>
</tr>
<tr>
<td>Final Product</td>
<td>The article is not accurate.</td>
<td>Students create an accurate article but it does not adequately address the performance task.</td>
<td>Students create an accurate article that adequately addresses the performance task.</td>
<td>Students create an original, accurate and interesting article that adequately addresses the performance tasks.</td>
</tr>
</tbody>
</table>

**Appendix C**

**Pre-survey**

https://goo.gl/forms/53nTPUI1ggkZeFRE3
COLLABORATIVE WRITING THROUGH GOOGLE DOCS

Students’ Knowledge and Experience with Google Docs

*Required

Email address *

Your email address

1) What is your gender? *
   - Male
   - Female

2) What is your age? (in years) *

Your answer

3) Do you have a Gmail account?
   - Yes
   - No

6) Do you think technology is important in order to learn English? *
   - Yes
   - No

7) What types of tech-tools do you use in order to learn English? *

Your answer

8) Which skills has technology helped you increase your English performance? *
   - Speaking
   - Listening
   - Writing
   - Reading
Appendix D

Post-survey

Students’ Motivation towards Google Docs

https://es.surveymonkey.com/r/LVFY9PP

Students’ Evaluation and Opinions about applying Google Docs

Please choose the appropriate response that reflects your opinion for each of the following statements:

1 = Strongly Disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly Agree

1. I enjoyed using Google Docs to write the tourist magazine article collaboratively.

2. I would apply Google Docs to do academic assignments by groups in the future.

3. Google Docs is a useful tool for learning how to write magazine articles.

4. Using Google Docs for online peer-editing allowed me to improve my article.
5. It is motivating to post my article through Google Docs for my peers to edit and make comments.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. I would like to do similar tasks in groups again in the future.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. I learn some grammar and mechanics when I provide feedback on my classmates’ articles through Google Docs.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Appendix E**

8. I feel comfortable writing my article collaboratively by using Google Docs.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. I prefer using Google Docs to write academic papers in groups.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. There are some inconveniences when using Google Docs.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Results (Pre-Survey)

1) What is your gender?

- 60% Male
- 40% Female

20 responses

3) Do you have a Gmail account?

- 100% Yes

No responses
4) Have you used Google Docs before?

- Yes: 20%
- No: 80%

5) If you answered yes, how often do you use Google Docs?

- Everyday: 9.1%
- More than three times a week: 9.1%
- Less than three times a week: 9.1%
- Never: 9.1%
- Only Once: 9.1%
- Never: 18.2%
- I have never used google docs: 9.1%
- I have never used Google Docs: 18.2%

6) Do you think technology is important in order to learn English?

- Yes: 100%
7) What types of tech-tools do you use in order to learn English?

- I have used apps such as Duolingo or YouTube
- Duolingo, Spell Up, WordBite and GoComics
- YouTube, cell phone, computer, Google, Doo lingo
- Sometimes I watch videos in YouTube or I watch series in English, also rarely I read books in English.
- Youtube
- Music
- News
- I use differents apps such as: YouTube and Duolingo
- the application that I use is duolingo
- I have used youtube
- Duolingo, Youtube and translator.

8) Which skills has technology helped you increase your English performance?

- Speaking: 14 (70%)
- Listening: 15 (75%)
- Writing: 19 (95%)
- Reading: 16 (90%)
9) Have you applied a tech-tool to write/do homework in English?

10) If you answered yes, which tech-tool have you applied?

- I have used word and google translator
- Youtube, WordReference and WordBit
- Microsoft Word
- I used the translator to perform my homework.
- Google Traductor
- Duolingo
- Word and Google translator
- I have used the computer to do the works of the works of the songs that the teacher published monthly, also at the moment of realizing the projects of the reference matter
- The google translator
- Word.
- Translator and dictionary
Appendix F

Results (Post-Survey)

P1

I enjoyed using Google Docs to write the travel magazine article collaboratively.

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>NEITHER AGREE OR DISAGREE</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
<th>TOTAL</th>
<th>PROMEDIO PONDERADO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>71.43%</td>
<td>28.57%</td>
<td>21</td>
<td>4.29</td>
</tr>
</tbody>
</table>

P2

I would apply Google Docs to do academic assignments by groups in the future.

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>NEITHER AGREE OR DISAGREE</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
<th>TOTAL</th>
<th>PROMEDIO PONDERADO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.00%</td>
<td>0.00%</td>
<td>14.29%</td>
<td>61.90%</td>
<td>23.81%</td>
<td>21</td>
<td>4.10</td>
</tr>
</tbody>
</table>

P3

Google Docs is a useful tool for learning how to write magazine articles.

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>NEITHER AGREE OR DISAGREE</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
<th>TOTAL</th>
<th>PROMEDIO PONDERADO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.00%</td>
<td>0.00%</td>
<td>19.02%</td>
<td>38.10%</td>
<td>42.86%</td>
<td>21</td>
<td>4.24</td>
</tr>
</tbody>
</table>

P4

Using Google Docs for online peer-editing allowed me to improve my travel magazine article.

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>NEITHER AGREE OR DISAGREE</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
<th>TOTAL</th>
<th>PROMEDIO PONDERADO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.00%</td>
<td>0.00%</td>
<td>14.29%</td>
<td>42.86%</td>
<td>45.88%</td>
<td>21</td>
<td>4.29</td>
</tr>
</tbody>
</table>

P5

It is motivating to post my article through Google Docs for my peers to edit and make comments.
P6
I would like to do similar tasks in groups again in the future.

P7
I learn some grammar and mechanics when I provide feedback on my classmates’ articles through Google Docs.

P8
I feel comfortable writing my article collaboratively by using Google Docs.

P9
I prefer using Google Docs to write academic papers in groups.

P10
There were some inconveniences when using Google Docs.