Polo del Conocimiento

Uso de guías gratuitas para mejorar las habilidades de escritura de los estudiantes en las aulas virtuales

Using storyboarding to enhance students' writing skills in virtual classrooms

Usando o storyboard para aprimorar as habilidades de escrita dos alunos em salas de aula virtuais

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Ciencias de la Educación
Artículo de Investigación

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Resumen

Este artículo ha sido escrito para describir un recurso didáctico tecnológico para mejorar las habilidades de escritura en los estudiantes del Segundo nivel de inglés de la Faultad de Ciencias Económicas de la Universidad de Guayaquil mediante el uso de la plataforma Storyboard. Esta plataforma se aplicó no solo para mejorar las habilidades de escritura, sino también para hacerlos más creativos al escribir sus historias o diálogos. Por lo tanto, la plataforma de guiones gráficos es una manera más interesante y eficiente para presenter las actividades. Esta herramienta debe ser considerada como parte de la planificación en clase. El objetivo de esta investigación fue conocer la influencia que tuvo el uso de esta plataforma en los estudiantes para mejorar la habilidad de escritura, tomando en consideración que su uso e integración no fue complejo y que pudieron desarrollar las actividades confortablemente estando motivados todo el tiempo. Este recurso, también debe ser considerado como un elemento principal para ser aplicado por todos los profesores quienes desean obtener mejores resultados. Por lo tanto, este estudio analizó como el uso de Storboard ayudó a los estudiantes a expresarse más fácil y rápido usando métodos tecnológicos interactivos.

Pabras Claves: enseñanza; métodos tecnológicos interactivos; habilidad de escritura; herramienta; influencia; Storyboard; plataforma.

Abstract

This article has been written to describe a technological teaching resource from the website to enhance writing skills on the second-level English students at the Economics Faculty at the University of Guayaquil through the use of Storyboard platform. The Storyboard was applied not only to improve students' writing skills, but also to make them more creative when writing their stories or dialogues. Thus, storyboard platform is a great resource for presenting them more interestingly and efficiently. Moreover, it has to be measured in the planning in the class. The aim of this research was to know whether there was an influence of using storyboard on the students, taking into account that its use and integration was not complex to make students work more comfortably in groups or on their own, being self-motivated all the time. This resource, is also considered as a main instrument to be applied for all the teachers who want to get better results.

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Therefore, this study analyzed how Storyboard helped students to express easier and faster in writing using interactive technological methods.

Keywords: Teaching; interactive technological methods; writing skill; tool; influence; storyboard platform.

Resumo

Este artigo foi escrito para descrever um recurso didático tecnológico do site para aprimorar as habilidades de escrita dos alunos de inglês do segundo nível da Faculdade de Economia da Universidade de Guayaquil através do uso da plataforma Storyboard. O Storyboard foi aplicado não apenas para melhorar a escrita dos alunos, mas também para torná-los mais criativos na hora de escrever suas histórias ou diálogos. Assim, a plataforma de storyboard é um ótimo recurso para apresentá-los de forma mais interessante e eficiente. Além disso, tem que ser medido no planejamento da aula. O objetivo desta investigação foi saber se houve influência da utilização do storyboard nos alunos, tendo em conta que a sua utilização e integração não era complexa para fazer com que os alunos trabalhassem mais confortavelmente em grupo ou sozinhos, sendo automotivados durante todo o Tempo. Este recurso, também é considerado o principal instrumento a ser aplicado por todos os professores que desejam obter melhores resultados. Portanto, este estudo analisou como o Storyboard ajudou os alunos a se expressarem de maneira mais fácil e rápida na escrita usando métodos tecnológicos interativos.

Palavras-chave: ensino, métodos tecnológicos interativos; habilidade de escrita; ferramenta; influência; plataforma de storyboard.

Introduction

English has always been seen as a universal language, and this is the main objective to get in touch with different countries since it allows socializing and interacting in a better way such as: educational, scientific, technological, business and political fields. English has four skills such as listening, speaking, reading and writing which are needed when a person is studying this language as a part of the institutional curriculum.

Writing skills are specific abilities which helps writers to put their thoughts and ideas into words in a significant and to rationally interact with the message. Learning tips about how to write in a

second language is one of the most challenging aspects for the students. Thus, this is not an easy process, as mastering grammar and punctuation marks, they are not elements to become a writer. A person needs not only a mastery of several elements to use the language, but also they need to organize ideas and thoughts and it is sometimes difficult for the students.

People who speak English find it difficult to engage in conversation and express themselves to others. Speaking is not the only way for communication in English, it has more abilities such writing skill that allow students and people in general to express themselves effectively as well as speaking.

Therefore, it is essential that students have the opportunity to learn how to communicate differently through written messages and the readers can understand them faster. For this research, the sample was taken from the students of the second level of English of the Faculty of Economics at the University of Guayaquil. This sample indicated that writing skills were underdeveloped when surveys were applied according to the Common European Framework of Reference (CEFR) levels in which is mandatory for the students of higher education is required to reach a minimum of B1.

Additionally, it is fundamental that the students feel motivated to participate actively in class, this is a good method to make students develop their writing skills, taking into account that the objective of this study is that students not only reach the level they need at the end of this course, but rather, that they can further expand the knowledge of the language.

Nowadays, technology has contributed to technological resources that make teacher works easily in and out the class. Regarding the development of writing skills, Storyboard is great option to apply, especially in a virtual classroom, therefore, teachers needed to get access to the technology in looking for several technological resources to teach since the pandemic started in 2019.

According to (S. L Gupta, 2022), she said that Educational Institutions all over the world are facing a similar fix and have taken the assistance of the digital technology to maintain regularity in class. Considering this finding, it is noticeable that even thought people have the biggest challenge in learning how to get access to the technology, they continue working and education never stopped.

This research work had the perspective of improving teaching in terms of learning to write through an interactive and functional approach, contributing to the cognitive memory and possible applications in the classroom because as technology developments, students tend to

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minimize their work through the use of applications that resolve and correct spelling mistakes, but do not feed their knowledge to be able to make essays, summaries, projects, etc., which merit elaborate them in written form and have the quality in their texts. (Trejo, 2018)

Literature Review

Technology has meaningfully underwritten to the evolution of some skills that make acquiring new ones and knowledge in somewhat standard easier. In such a way, ICT in the field of education has created spaces in which teachers adapt to the new changes to teaching their classes with different methodological strategies.

Presently, technology has accomplished to attract the attention of students, who in many cases do not usually have the interest to learn something new; however, the use of technology has been able to achieve exceptional results of students towards ICT, and they have shown a positive attitude toward the use of some platform in the class.

For an individual in today's society, the need to apply reading and writing with solid knowledge bases, enriched, within the educational systems is mandatory, because of their subsequent performance will depend on their development in any field of work that comes to apply, this being competitive, there are many difficulties in retaining information when it is long, boring, and somewhat repetitive, making it even more difficult to grasp information. (Intel Education, 2017)

Technology and teaching resources go hand in hand, students feel self-motivated to use it as the world is transforming all the time, this tool was one of the most useful technique to approach students to the writing process in a virtual classroom. Thanks to the technology that offers teacher a lot of applications to transmit knowledge since educators and students are involved in this process.

Story board in enhancing writing skills

The Storyboards teaching strategy assisted students to keep track of a narrative's main ideas and supporting details by having them illustrate the story's important scenes. Storyboarding was used to place what they read or what they have in their mind independently. This platform is

meaningful not only to enhance students' writing skills, but also the develop their imagination which is the main factor in written exercises.

The purpose of using the storyboard platform was to organize and manage information and ideas easier and faster as well, facilitating students' comprehension and assimilation of information by integrating visual elements from the text and other visual aids to show relationships and connections between terms, facts, and concepts. Therefore, students were able to express themselves while working in groups in an online class much better.

The storyboard is commonly used for:

- Visualize and present information in an easy and simple way.
- Breaking down large, complex concepts into smaller, simplified parts.
- Help students to actively participate in the learning process
- Increase retention capacity to learn new concepts and ideas.
- Promote self-learning to take notes, study and analyze
- Improving writing skills and the creative process.

According to (Edi Pujo Basuki, 2020), he stated that the media picture (*storyboard*) is a media that is a reproduction of the original form in dimensions, in the form of photographs or paintings. *Storyboard technique* is activity before writing that emphasizes the elaboration (detailed explanation) predictions or estimates, the growth of ideas, and sequencing. Therefore, it was a great element for the students, who showed a positive attitude toward this application, beside it, students could work better in groups in the class using their imagination in different situations of the story that they created.

Consequently, it was important to take into account that for an online class was necessary a good environment among teachers and students in other to achieve the goals. (Novitasary, 2021, p. 8), he stated that for creating an effective online learning model, we need to pay attention to the needs of students and the criteria for effective online learning.

There were some experiments done by some research, who applied the same platform for writing skills and the said that it was meaningful because students were self-motivated and also they had a good writing communication in class using the different characters, colors, forms and designs which contributed to this important process.

(Islamiati, 2021) he stated that there is effect of using storyboard technique in students' writing ability especially writing recount text. In addition, the use of storyboard technique was able to improve the students' achievement in writing.

Virtual classrooms

Teaching is considered as an art, but it depends on the methodological resources adopted in the classroom and the skills of the teacher to keep students going. Globalization has brought technological changes all over the world. For instance, smart phones, tablets, computers, internet, all of them are tools to apply in teaching. The meaning of virtual classroom is one of these changes. Teachers had to face difficulties at the beginning in order to continue working. Fortunately, they overcame this barrier just for the students who plays an important role in Education.

A virtual classroom is a set of teaching-learning resources which the purpose of enhancing learning experience of students using several technological devices to make it easier and practical. The aim was to search for a new tendency in teaching due to the pandemic, even though the obstacles or situations to face to acknowledge the advantages of a virtual environment where not only the teachers had to do their best, but also there was commitment among students and authorities as well.

Considering the findings of (Biswas, 2020), he stated that the challenges in a virtual learning may be internal/ subjective and external/ objective from the perspective of the teacher and the taught.

Statement of the Problem

For an environment in constant innovation, the deficient improvements in teaching techniques related to enhancing reasoning, analysis and communication, which promote skills in written communication in an effective manner, is somewhat obsolete, it has become a challenge for teachers to develop critical thinking to meet current trends and those of tomorrow. While it is true that writing will always be linked to comprehensive reading and others teaching methods that could be very active to increase intellectual and cognitive performance in all aspects of life.

Furthermore, academic writing skills are pretty essential to establish an argumentation, but with some   deficits when developing and writing them, thereby, they were not able to generate a

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discussion or evaluation worse the understanding of the one who receives it or reader, even knowing that prior to this the teacher had to have taught them words and concepts for the student to learn and practice, being able to familiarize them during the process, demonstrating the indifference to continue increasing their knowledge diminishing their cognitive abilities, besides the possibilities in facing a globalized world.

Formulation of the Problem

¿How does the storyboard platform was applied in order to foster students to develop their writing skills?

Rationale

This research proposal aimed to insert as a pedagogical resource the use of visual media in order to improve educational teaching related to the learning of writing at all levels, due to the capacity of attraction and cognitive stimulation, through the use of the storyboard, where the student or receiver establishes through the visualization of a set of images with movements or animations organized and sequential, the structuring of a content achieving to facilitate understanding without the need to incorporate a text that interprets it. (Munayco, 2018)

This type of stimulation has a high percentage of creativity, since it turns teaching into participative. Moreover, teachers can stimulate the acquisition of information, through practical tasks of elaboration of graphic scripts, evaluating the potential of the student's critical thinking, communication, collaboration of the student or user, as the easy handling allows the construction of different environments or scenarios in addition to the incorporation of elements or characters that narrate a topic that requires attention. (Iberoamerican Journal of Education, 2018)

According to the journal, teachers have to foster student to develop their creativity due to this is essential in the teaching-learning process, so they can build stories or short conversations letting their thoughts flow to present in class and they can feel happiness of knowing that their works are place is such way that their teacher or classmate enjoyed it when presenting in class.

Another justification was that it is a tool that allows to express knowledge through an active methodology, which helped the students to face the difficulties of writing at the time of reading and understanding, it also provided a number of information, visually relating the environment synthesizing what was required, the results was obtained during the application of this learning

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technique being quantified and qualified, since there was much curiosity that was awaken in the student, considering this proposal as viable. (INTEF, 2020)

With this tool, the students were able to be more organized in a virtual environment, assigning roles each other while the teacher monitored them. Besides, they agreed on the topic before selecting the characters of the story. This platform has many characters which help students to be more creative. The topic for this activity with second level English students was sequencers. Teachers can assign them different topics to make them practice this relevant skill.

General Objectives

To determine the capacity to capture information regarding the learning of writing techniques through the application of storyboards.

Specific Objectives

- Make teaching easy and practical developing critical thinking and cognitive stimulation of the student.
- Promote learning by stimulating curiosity to obtain more information on the required topic.
- Allow to evaluate quantitative results (grades) and qualitative results (quality and level of learning).
- Increases the ability to solve problems encountered during the preparation stage.

Methodology

A methodological strategy was used for this project that demonstrated to the student the learning, creativity, development of writing skills through the use of the storyboard tool, it also allowed to establish the development of cognitive memory, critical thinking, in addition to increasing the quality of the written technique, and the improvement of academic performance.

Methodological design

Hernández, Fernández and Baptista (2010), refer that the design is of experimental research type, since it intends to manipulate and describe the influence of the variable "Graphic organizers"

through the test or its manipulation, giving it the character of a quasi-experimental design, with two groups, experimental and control.

Techniques and instruments

The first test (pretest) consisted of 3 texts, between expository and argumentative, with 12 questions each, subdivided into literal (4 items), inferential (6 items), and critical (2 items) levels. The writing exercises together made a total of 36 items with different topics, graphic organizers were not used. It was applied to know the writing level conditions in which the students of the second level of English of the University of Guayaquil found themselves.

The post-test had the same similarity in structure as the pretest, with the difference that activities were more complex and each one of them contained, in a preset form, graphic organizers such as semantic map, semantic network and mental map, aimed at measuring reading levels.

Before implementing the tests, a pilot test was applied to a group, with positive results, making slight changes, and then the tests were validated with the judgment of experts, who were 4 teachers in the area of Linguistics and Literature, who verified that the tests have clarity, objectivity, timeliness, organization, sufficiency, intentionality, consistency, coherence, methodology and timeliness.

Population and simple

Thirty-six students from the first cycle of the University of Guayaquil, in the province of Guayas, between 19 and 25 years of age, 25 females and 11 males, participated. Two intact groups of 18 students each were formed, the control group with students of the mathematics specialty and the experimental group, with those of the Communication area.

Data processing

The results were processed at the descriptive level and at the inferential level, according to the objectives and hypotheses proposed. At the descriptive level, frequencies and percentages were used to determine the predominant levels of the dependent variable of the students of the University of Guayaquil. At the inferential level, use was made of parametric statistics and as such Student's T test was used for the difference of means, since the data presented normal distribution.

Results

Application and analysis

Figure 1: Results obtained at the pre-test level

Statistigraphers	Experimental Group	Group Control
N	18	18
Averaged	22,67	21,5
Standard deviation	4,42	3,79
Variation coefficient	20%	17,62%

Source: own preparation

The use of the quasi-experimental design with pretest, had the purpose of determining the writing comprehension level of the students who participated in the research, being necessary to control some type of distortion that could occur in the final results, and that these could lead to unreal interpretations or erroneous conclusions.

In this way, the experimental group and the control group, whose results have been called Y1 and Y3, respectively, have been evaluated. The information obtained has been processed taking into account the statistical guidelines that allow the coherent manipulation of the information with manageable data, simple to interpret and easy to operate. The table shows an average of 22.67 for the experimental group and 21.5 for the control group, with a slight difference of 1.17 points. It is concluded that both groups were in similar conditions at the beginning of the research, taking into account that graphic organizers were not yet used. It was a structured evaluation, where each participant could use the strategies they considered convenient.

Application of graphic organizers in writing skill.

Figure 2: Results obtained at the pro test level

Statistigraphers	Experimental Group	Group Control

N	18	18
Averaged	28,06	22,67
Standard deviation	4,07	3,48
Variation coefficient	15%	13,40%

Source: own preparation

The application of the exit test was carried out in the first week of January 2022, when the first academic semester had already ended and the topics of writing were studied for 16 weeks in both groups. The control group worked in the traditional way and the experimental group with the application of graphic organizers, semantic network, semantic maps and mind maps. The experimental group presented a better writing communication skills through the use of this recourse.

According to the results obtained in Table 2, it is evident that there were improvements in the level of writing communication in relation to the experimental group. Likewise, when observing in detail the values of the descriptive statistics of the scores obtained, both at the level of the experimental group and the control group, at the Post-test level, it can be observed that the means of the experimental group are 28.06 and the control group obtains 22.67. They are numerically different by 5.39. In effect, we can summarize that after the application of the graphic organizers, the levels in which the increase of writing communication is improved in the experimental group in relation to the control group. In this sense, Arévalo (2015) says that when he states that graphic organizers increase the production of writing.

The semantic map at the literal level of reading comprehension.

Figure 3: Results of the post-test at the literal reading comprehension level

Statistigraphers	Experimental Group	Group Control
N	18	18
Averaged	9,44	8,39
Standard deviation	1,63	1,38
Variation coefficient	17%	16,40%

Source: own preparation

As can be seen in these results, both teams are 1.05 apart. The experimental group maintained a minimal advantage (9.44) over the control group (8.39). They were given the same test, the same time, but the results were slightly different. Therefore, it is evident that the semantic map used in this post-test does have an influence as a graphic organizer applied in writing at the literal level. Both groups had similar average scores in this level. Viramonte (2000) says that since there is not much difference in both groups, the literal level continues to be the most outstanding of the three writing activities done in each class.

According to Heimlich and Pittelman (1990) this scheme generates meaning and comprehension of the story as was the case in the present research, since the students of the Universidad de Guayaquil acquired considerable grades in the literal level.

Use of the semantic network at the inferential level of communication skill

Figure 4: Inferential results

Statistigraphers	Experimental Group	Group Control
N	18	18
Averaged	13,94	10,39
Standard deviation	2,36	2,03
Variation coefficient	17%	17,50%

Source: own preparation

Table 4 shows the results of the post-test on the inferential level of reading comprehension, where the experimental group obtained an average of 13.94 points, with respect to the average of the post-test control group, which was 10.39, showing a difference of 3.55 in favor of the experimental group. In order to obtain these results, the graphic organizer called semantic network is used, which, according to the evidence presented, does contribute to the improving of writing skill at the inferential level.

As is known, one of the high points of writing skill is the inferential level, because as writers is needed to go deeper, to demonstrate practical achievements. This table is suggestive of the use of this scheme in a virtual class. We value the research of Quillan and Collins (1968), when they

state that the semantic network is the ideal graphic organizer for inferring and making deductions, which is what is so lacking in higher education students. Teachers have to go beyond the text, go beyond the literal in which they also agree with Cassany (2000), to discover new technological resources as an expository writing presentations.

The mind map at the critical level of reading comprehension.

Figure 5: Results critical level reading comprehension

Statistigraphers	Experimental Group	Group Control
N	18	18
Averaged	4,17	4,11
Standard deviation	1,09	1,13
Variation coefficient	26%	27,50%

Source: own preparation

The mind map was used to measure the critical level of reading comprehension, but the results were not encouraging in the experimental group. In the literal level, good results were obtained, but this measurement was not the objective. The experimental group obtained an average of 4.17 points, with respect to the average of the control group, which was 4.11, with a difference of 0.06 in favor of the experimental group, which is not a very satisfactory statistic to confirm the influence of this graphic organizer on reading comprehension at the critical level. It is assumed that due to the characteristics of this graphic organizer, with its striking title, use of images, color and design, it is more focused on the literal level. Agreed with Mamani (2010) when he states that this scheme helps to counteract the problem of reading comprehension, in this case not at the critical level, but at the literal level.

Comparison of statistics at Pretest y el Postest

Figure 6: Comparación

Group	media	Standard deviation	Variation coefficient
Control pre test	22,5	4,42	17,62%
Control post test	22,67	3,48	13,40%

Variation	-0,17	-0,62	-4,22
Exp pre test	22,67 %	3,79%	20%
Exp post test	28,65 %	4,7	14,50%
Variation	5,38	-0,21	6%

Source: own preparation

As can be seen in the table, the variation of the central tendency statistics of the Posttest with respect to the Pretest of the experimental group (5.38) is much higher with respect to the control group (0.17), with a difference of (5.21) in favor of the experimental group, an aspect that demonstrates the effectiveness of the use of graphic organizers in the improvement of writing skill. Likewise, it is observed that the dispersion statistics have decreased, experimental group (5.5) and control group (4.22), which shows that at the Posttest level the results are more homogeneous with respect to the Pretest scores, this decrease being more significant in the experimental group. This variation expresses that the writing communication skills in the experimental group has improved against to the control group, thanks to the graphic organizers (semantic map, semantic network and mind map).

Conclusions

Writing skills is one of the essential aspects that we must improve nowadays using the appropriate strategies to promote it. According to the evidence presented in the graphs, tables and hypothesis tests, it is confirmed that graphic organizers contribute efficiently to the improvement of writing skills in second level English students at the Faculty of Economics.

The semantic map at the literal level allowed a significant improvement in writing skills in second English level students. Its adequate use its use was meaningful during its application.

The use of the semantic network as a graphic organizer significantly influenced the inferential level in writing. If teachers properly use the elements of this scheme, new ideas stand out, students will enhance their writing communication skills. High results were achieved in the inferential level, since the students of the experimental group were more predominant in the literal aspect in the pretest, and later they were able to surpass themselves.

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On the whole, the use of mind maps as a graphic organizer contribute to foster students in being creating when working on their writing skills. It should be added that this scheme has a peculiar style of constructing and writing not only stories but also, they can choose topics they consider relevant to share in class. Moreover, the students developed their imagination and creativity, but the characteristics of this scheme were inclined to the literal level.

Research line

This project was directed to the pedagogical improvement of the learning methodologies of writing, embracing new tools that are at the forefront of a globalized world, creating a competitive, interdisciplinary society, developing programs whose mechanisms of action are derived from creativity, quality, facing the constant challenges that arise at any stage of life within the work environment.

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