

Implementing the creation of comics using information and communication technologies to enhance reading and writing skills strengthening the autonomous learning of the 11-2 section at marco tulio salazar nocturnal high school during the second Quarter of 2022

Ingrid Jiménez Zuñiga

injizu@gmail.com

<https://orcid.org/0000-0002-2980-0285>

Afiliación institucional del equipo de investigación
San José, Costa Rica

ABSTRACT

The instruction of the four English skills was affected by the interruption of face-to-face classes during the pandemic and the lack of strategies to adequately assume virtuality. Given the situation, different investigations have shown that reading and writing have been the least developed skills in virtual reality. This research focused on the impact that the creation of comics using information and communication technologies and the autonomous learning of adult students from a night high school located in Costa Rica had on improving their reading and writing skills. The creation of comics was implemented as a new strategy to analyze the scope of the use of technologies in the learning process considering its role in current life. Autonomy was analyzed during the study using selected instrumentation to evaluate the actions carried out by the students before and after the implementation of the activities, as well as the improvement of reading and writing. The results obtained showed an improvement that went beyond reading and writing skills, the use of ICT and autonomy were positively affected, in addition to demonstrating that all the elements used worked complementing each other in the same strategy.

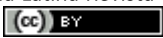
Keywords: *comics; icts; reading; writing; autonomous learning*

Correspondencia: injizu@gmail.com

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Implementando la creación de historietas usando información y tecnologías de la comunicación para potenciar las habilidades de lectura y escritura fortaleciendo el aprendizaje autónomo de la sección 11-2 en el liceo nocturno marco tulio salazar durante el segundo trimestre de 2022

RESUMEN

La instrucción de las cuatro habilidades del inglés se vio afectada por la interrupción de las clases presenciales durante la pandemia por ello, diferentes investigaciones han demostrado que la lectura y la escritura han sido las habilidades menos desarrolladas en la virtualidad. Esta investigación se centró en el impacto que tuvo la creación de historietas utilizando las tecnologías de la información y la comunicación y el aprendizaje autónomo de estudiantes adultos de un liceo nocturno ubicado en Costa Rica en la mejora de sus habilidades de lectura y escritura. La creación de historietas se implementó como una nueva estrategia para analizar el alcance del uso de las tecnologías en el proceso de aprendizaje considerando su rol en la vida actual. Se analizó la autonomía durante el estudio utilizando instrumentación seleccionada para evaluar las acciones realizadas por los estudiantes antes y después de la implementación de las actividades, así como la mejora de la lectura y escritura. Los resultados obtenidos evidenciaron una mejora que fue más allá de las habilidades de lectura y escritura, el uso de las TIC y la autonomía se vieron afectados positivamente, además de demostrar que todos los elementos utilizados funcionaron complementándose en una misma estrategia.

Palabras clave: *historietas; TIC; lectura; escritura; Aprendizaje autónomo*

INTRODUCTION

The usefulness of Information and Communication Technologies has been present for many years in education however, the last two years facing the pandemic have represented an increase in their use for learning purposes. Portal Educa (2021) explains that at least 80% of educators incremented the use of technological tools during virtual lessons and have continued using them back in face-to-face lessons. (para.3) In that context, the purpose of the present investigation is to analyze if students are using those tools by themselves as a recourse to learning autonomously and to connect that use with the creation of comics as a strategy that has the intention of generating an improvement of reading and writing skills of English language. Additionally, the skills of reading and writing are the focus of this inquiry due to the decrease they have experimented on the level of performance of students last two years. Spector (2021) reports important findings from a recent investigation made by researchers from the University of Stanford about the impact that the pandemic has had on the reading abilities of students evidencing that unfortunately, the development of the skill is at pause. (para. 12.) About that the researcher considers that pause expands to most countries and Costa Rica is not an exception. Berman (2015) reflects on her experience as a teacher and concludes that most students consider reading tasks as the most tedious. On the other hand, writing is another skill that has been on standby last two years, regarding that Edyburn (2021) asserts that technology not only should be considered a good helper for students that are improving their abilities in writing but also should be considered useful for evaluation. Thus, both aspects are beneficial for students and teachers who can recognize some gaps in learners and take action to come up with the correct activities for them according to their needs. This project of investigation pretends to develop a new strategy for better reading and writing skills. The strategy includes the creation of comics and the autonomous actions taken by the students to produce those comics using Information and Communication Technologies. With that aim clear, the author focuses on constructivism theory which was originally proposed by Lev Vygotsky and later analyzed by many investigators as is the case of Peiro 2021 who sustains that the learner is a protagonist in the learning process and not a bystander. Besides that, the connectivism theory by George Siemens highlights the figure of the learner as a creator that starts in his/her individualism the experience of

learning as cited by (Duke et.al. 2013. p. 7). This establishes a direct connection between the knowledge and the background that a person has to interpret the information. Additionally, experiential learning by John Dewey is another theory considered essential in this inquiry since points out that individual perceptions and their transformation into experiences are fundamental elements of learning as Grady (2003) explains, with that argument is understood that exist an emotional link in the middle of the acquisition of new information and its meaning to the person. This study also contemplates XXI century abilities, a contemporary theory that according to Stauffer (2021) consists in locating the learner in a current standard position that results in mandatory acquiring knowledge properly in the digital era. The XXI century abilities are 12 and include critical thinking, creativity, collaboration, technology literacy, and media literacy among other important abilities. Those abilities are considered part of the new literacy and take the person to a place of competence in a globalized world. Not less important is to mention the Information and Communication Technologies that according to UNESCO (2022) must be included in the government's plans for betterment that aim for the digitalization of educational programs. It is important to clarify at this point that information and communication technologies use the abbreviation ICT or ICTs in this investigation. On the other hand, this investigation analyzes autonomous learning and the author agrees with Keller (2016) since points the learner as a self-administrator of his/her learning process, that does not mean that students face the educational experiences completely alone because the guidance of the teacher is taken into consideration in all the theories and defended by many investigators as a fundamental part of the learning experience. Regarding the creation of comics as a strategy to teach Reading and writing, the author found important antecedents with the use of comics in education focused on Other areas such as Maths, but not specifically focused on language. That motivated the author to go deeper in her analysis and measure the scope of using comics to improve Reading and writing. Clever (2008) says that the person who constructs comics is first a writer, then, the person is also an editor, and finally becomes an artist. Having the skill of learning with independence goes hand in hand with the autonomous ability of the person that makes decisions to learn going beyond the instruction received from teachers. Those different stages in the process of constructing comics based on personal perceptions result undeniably in a meaningful

acquisition of content in the learner. For this study, the sample of participants is a group of eleven levels from Marco Tulio Salazar, San Miguel de Desamparados High School. San Miguel has an approximate population of 35279 inhabitants according to Municipalidad de Desamparados (n.d.), it is located in the South area of Desamparados. The nocturnal Institution has a population of 440 students that live in San Miguel and other small towns around. The population of the High School includes adults and minors. San Miguel Desamparados is a developed community with many commercial services such as drugstores, police stations, pet markets, and some others

METHODOLOGY

The present investigation has a mixed approach since it contains measurable information considered quantitative data obtained from the instrumentation implemented and also non-measurable data provided by the researcher as a qualitative aspect of information. Regarding the type of research, this is applied research since it uses the construction of comics while using ICTs and autonomous learning as the strategy implemented in this investigation. Additionally, this is a longitudinal investigation that occurs after the imposed lockdown to Covid-19 that affected and changed dramatically education. In Costa Rica, the use of technologies to sustain education from 2020 up to now has increased considerably. The challenges faced by educators and students gave shape to the new combined modality of teaching and learning, which is divided into face-to-face and virtual lessons. This study is using a micro-sample because it covers only a group of students in 11th grade from the three that the institution has. The size is reduced compared with the real amount of similar possibilities existent in the context of the study. Also, the topic is delimited to the implementation of only one strategy; the creation of comics by using ICTs. In addition, the skills that the researcher pretends to improve are only reading and writing and the aims of this inquiry are going to be worked since the union of both in the same objectives.) In the present research the two variables on which results are going to depend are the creation of comics using ICTs autonomously and the enhancement of reading and writing skills as the researcher wants to refresh at this point sharing again the title of this investigation: Implementing the creation of comics using information and communication technologies to enhance Reading and writing skills strengthening the autonomous learning of the 11-2 section at Marco Tulio Salazar Nocturnal High

School during the second quarter of 2022. Regarding the instrumentation used to obtain data, there were selected the interview made with the current teacher of the group, the observation made to the group of participants to evaluate their context in the class related to different aspects such as the internet connection they had, their confidence with the teacher, their level and use of English during the lesson, etc. Then, was applied a pre-questionnaire before the implementation of the activities and a post-questionnaire after the implementation of the activities to compare the changes produced with the strategy put in practice. Another character present in this analysis is the descriptive one which according to Child Care and early education (2022) refers to that research in which data set an examination of the correlation variables have had between them. (para. 2) That is possible thanks to the use of numbers and statistics that evidence different levels of information at different stages of the investigation.

RESULTS AND DISCUSSION

OBSERVATION

In the following table, the reader can have a previous image of the aspects that were present in the group of participants during the first meeting with the investigator. Something relevant was the low level of use of English observed not only in the students but also by part of the current teacher. On the other hand, it was possible to notice that the participants were familiarized with the use of cell phones, the internet, and some apps such as WhatsApp

| Aspect to be observed | Observed | Not Observed |
|---|----------|--------------|
| 1. The group looks confident with their teacher. | x | |
| 2. They have an internet connection provided by the institution. | | x |
| 3. Students use English to formulate questions. | | x |
| 4. The professor uses only the English language during the lesson | | x |
| 5. The classroom has technological devices | x | |
| 6. Most of the students have a cell phone. | x | |
| 7. The classroom is in good conditions | x | |
| 8. Students work organized during the lesson | | x |
| 9. The students have internet connections on their cell phones. | | x |
| 10. There were alternative ways of communication as a group. | x | |

INTERVIEW

This instrument allowed the researcher to get concrete first-hand information, especially concerning the strategy that was about to be implemented. After having interviewed the current teacher the researcher was clear that the students were not familiar with comics or the use of digital environments to learn reading and writing skills.

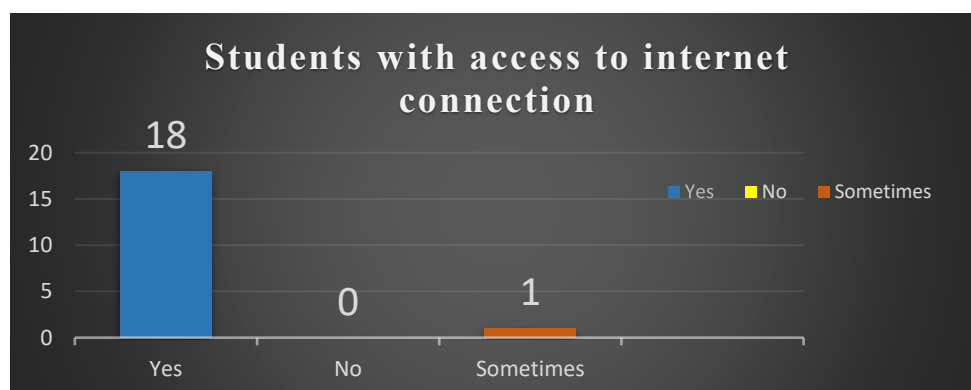
| Question | Answer |
|---|---|
| 1. What is the level of English that the students from this group have? | Poor, unappropriated for eleven graders, deficient. |
| 2. Have you ever implemented comics as a strategy to teach reading and writing in your lessons? | Never. |
| 3. Do you use apps or technologies to teach reading and writing to the group? | Only basic tools such as WhatsApp and the projector. |
| 4. From your experience as a professor what kind of strategies are better for teaching reading and writing to students? | Summarizing, rewriting, skimming, and scanning |
| 5. What do you think about using comics for teaching reading and writing? | Could be a good option but not in MEP system where time is not enough to go deeper with the different skills. |

MEP: Public Ministry of Education.

FIRST QUESTIONNAIRE

The first questionnaire applied to the group has the objective of getting information regarding the level of use of apps while learning to read and write in English that students had at the moment. At the same time with this instrument was possible to know if the students were familiar with comics and were used to studying autonomously. This instrument was applied before the implementation of the activities.

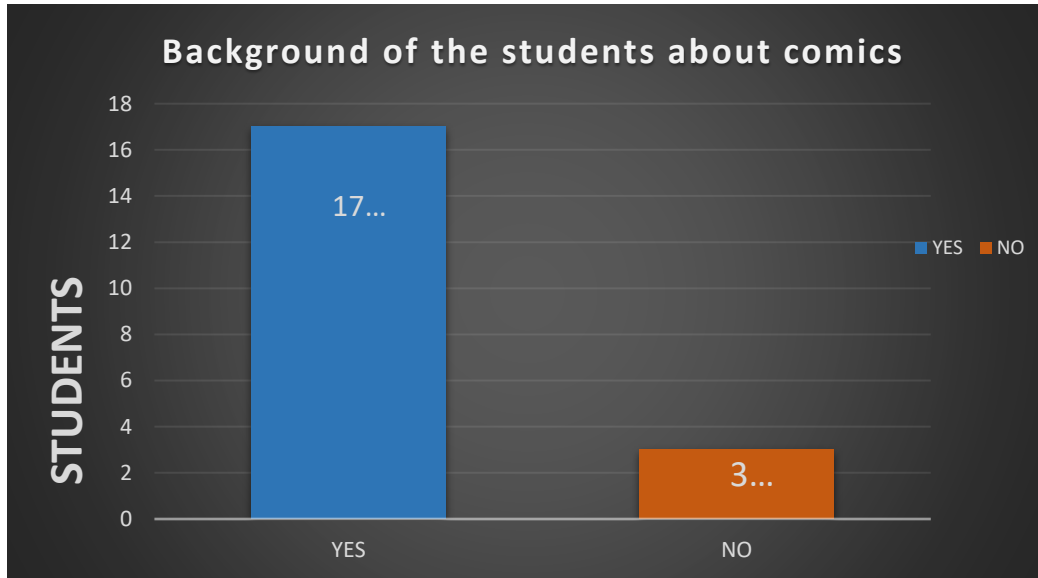
GRAPH # 1 INTERNET CONNECTION



Source: Questionnaire 1 Applied to the students.

The graph evidenced that all the participants had access to an internet connection and that allow the researcher to consider the investigation appropriate to the group.

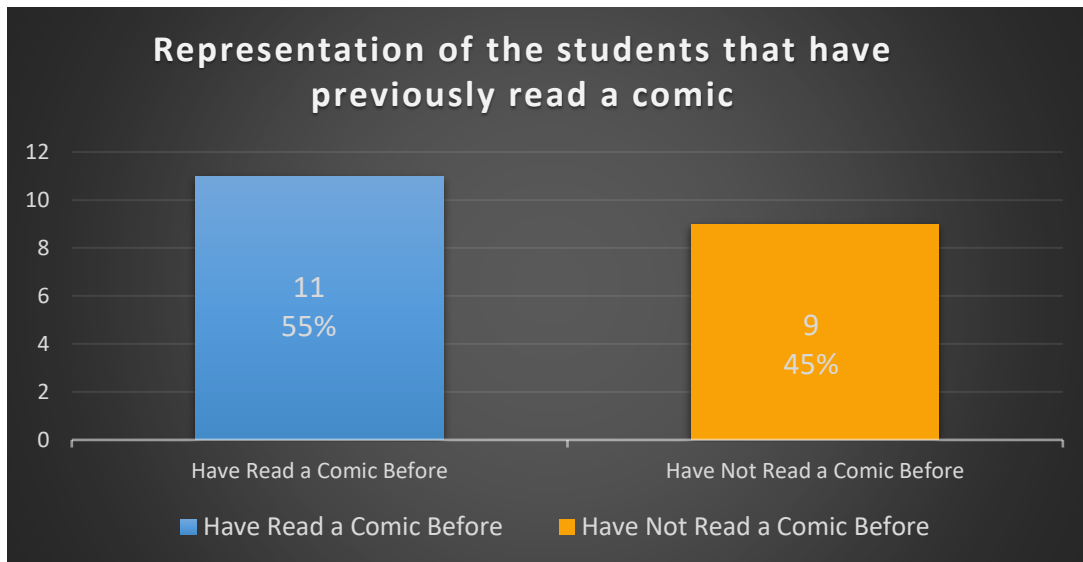
GRAPH #2 Knowledge About Comics



Source: Questionnaire 1 Applied to the students.

The previous graph evidences that most of the students in the group analyzed had some prior knowledge concerning comics.

Graph 3. Previous Experience Reading Comics

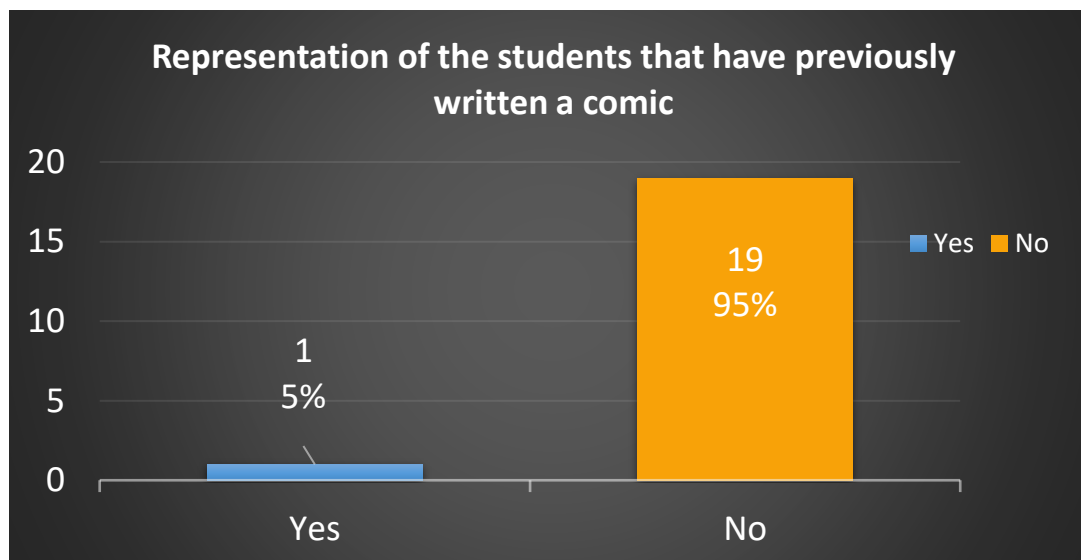


Source: Questionnaire 1 Applied to the students.

Regarding the experience of having read a comic before, 55% of the people equivalent to eleven students answered yes, and 9 students gave negative answers that belonged to a 45% of the students that replied to the first questionnaire.

Graph 4.

Previous Experience Writing Comics

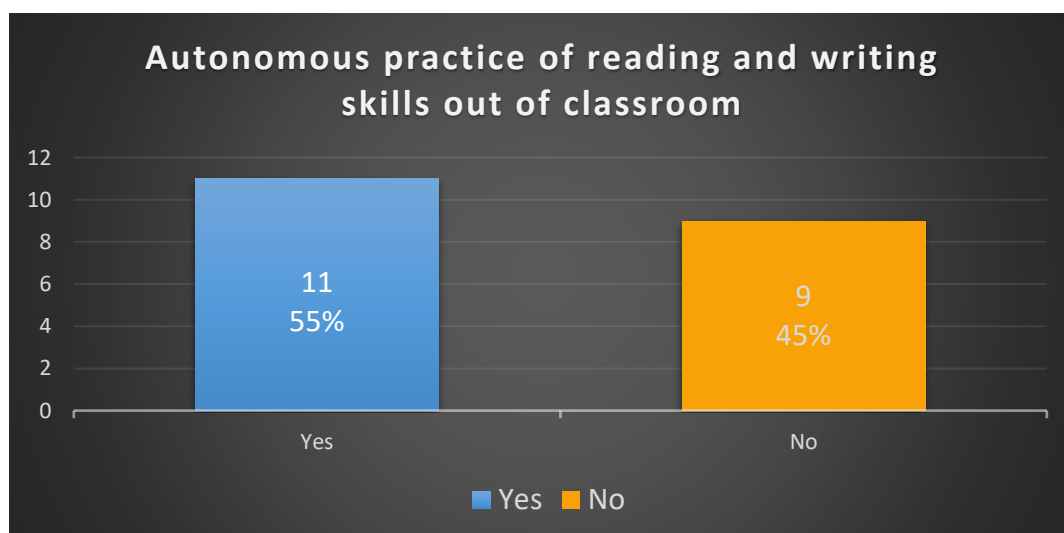


Source: Questionnaire 1 Applied to the students.

In the case of the students of the section 11-2 from Marco Tulio Salazar Nocturnal High School reading is more likely to happen than writing.

Graph 5.

Autonomous Study of Reading and Writing in the English Language

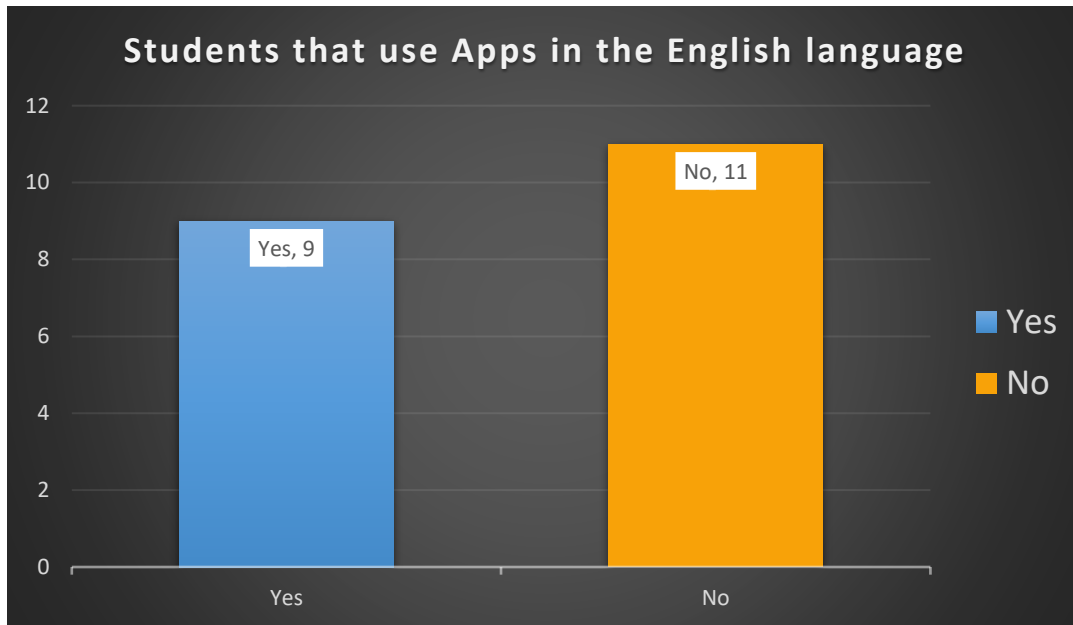


Source: Questionnaire 1 Applied to the students.

As the graph number 7 indicates, nine students recognized they do not study reading and writing out of the classroom, while eleven students said they do it.

Graph 6.

Use of Apps in the English language



Source: Questionnaire 1 Applied to the students.

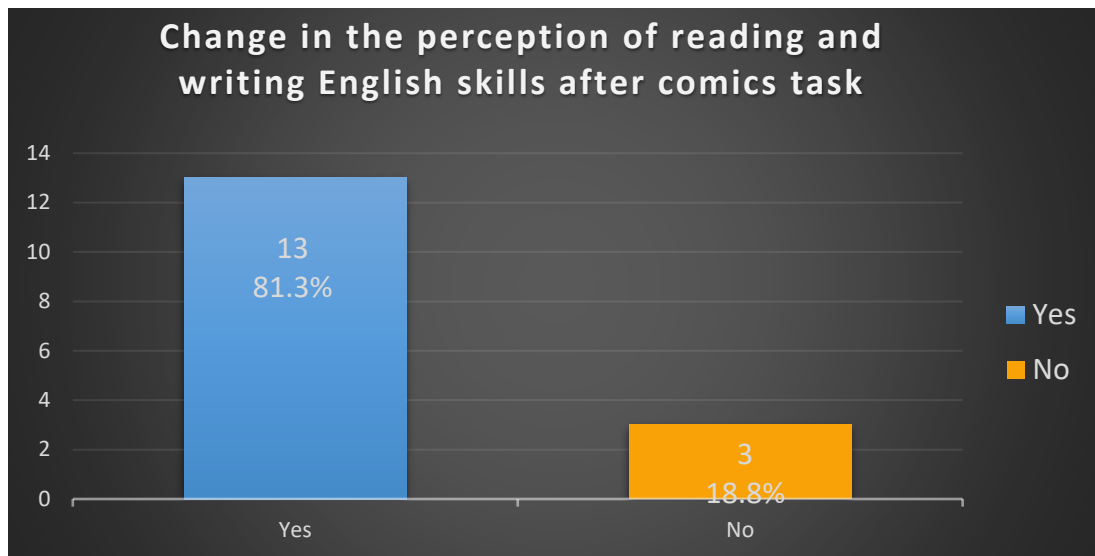
To understand graph nine, it is important to mention that 55% corresponds to eleven students that use apps in English in their daily life and the other 45% is equivalent to nine students that do not use any app in English as part of their daily life.

SECOND QUESTIONNAIRE

After the implementation of the activity proposed by the researcher which was the creation of a comic by part of the students in an independent way and out of the classroom, the students were ready to answer a second questionnaire. It is relevant to explain here that this time the questions were answered only by 16 students of the sample.

Graph 7.

Change in the Perspective of Reading and Writing in English After Comics activity.

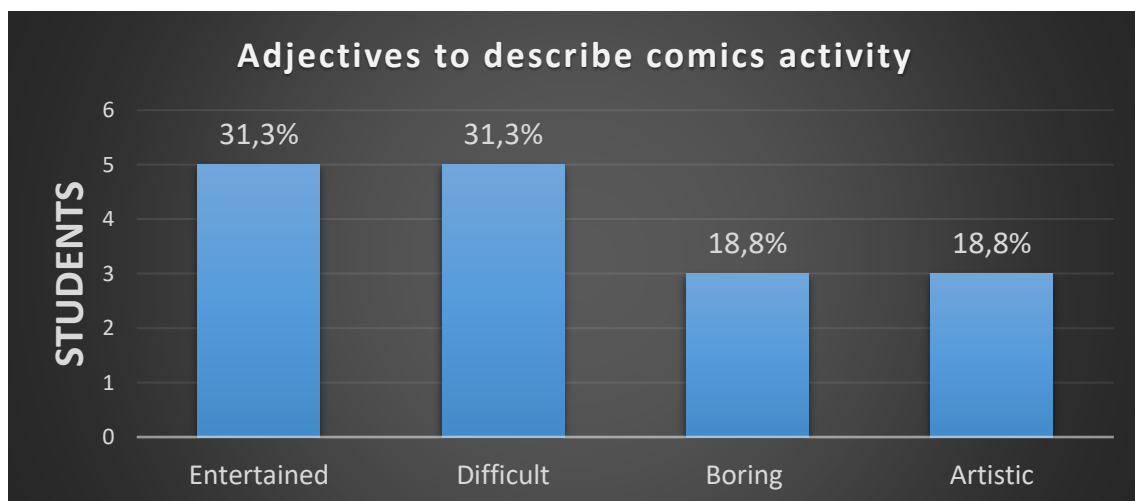


Source: Questionnaire 2 Applied to the students.

The graph shows a change in the perspective of 13 students in terms of reading and writing in English however, does not go deeper into specific aspects to analyze why that perspective changed.

Graph 8.

Perception Manifested by the Students About Comics Activity

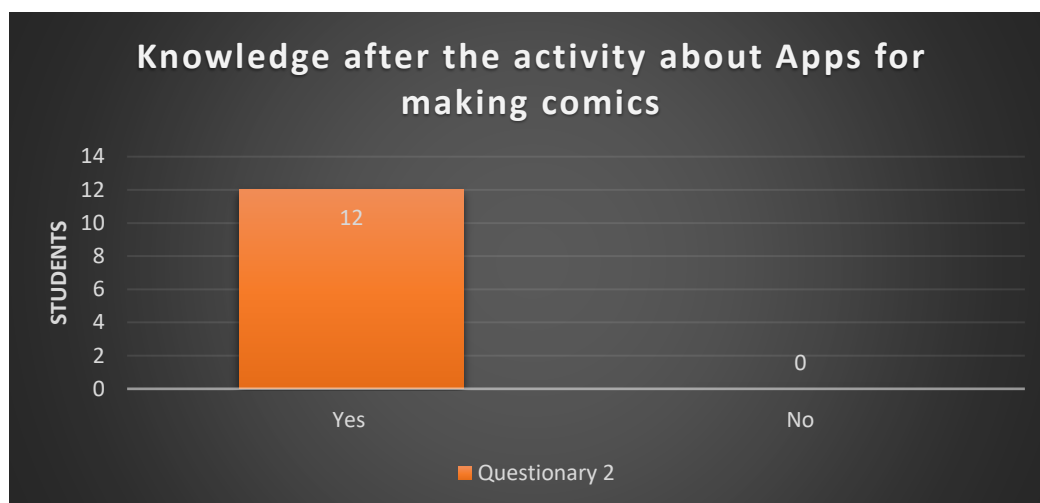


Source: Questionnaire 2 Applied to the students

In the last graph, 5 students chose entertained as the objective used to describe the activity made. Other 5 students oriented their answer to the adjective difficult while 3 of the 16 students that answer this second questionnaire considered the activity boring. On the other hand, 3 students decided the activity was artistic.

Graph 9.

Knowledge About some Apps Used to Make Comics.

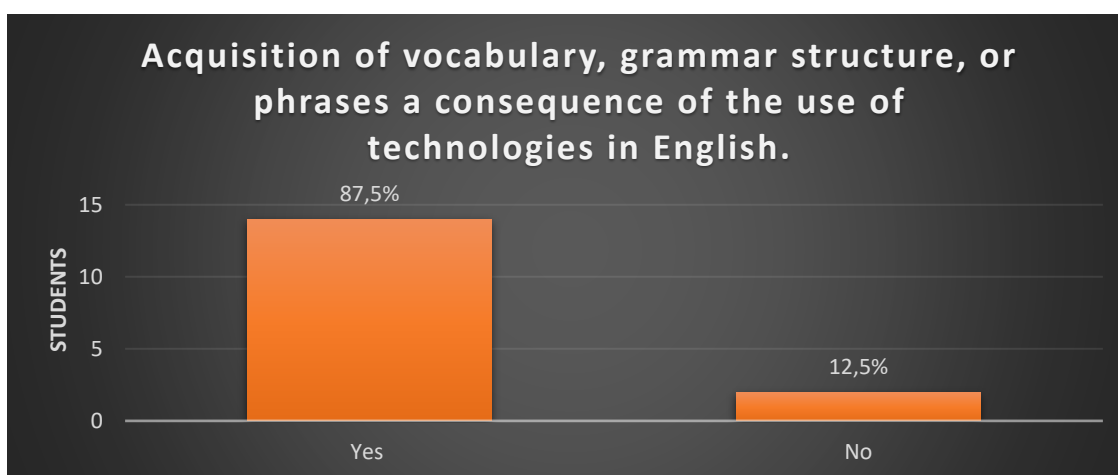


Source: Questionnaire 2 Applied to the students

The graph above shows in the column left that most of the students know some apps used to construct comics. That is a positive result according to the researcher that considered the activity provided the students with new tools to improve their reading and writing skills.

Graph 10.

Progress Obtained by the Students in Their Reading and Writing Production Through the use of Technologies.



Source: Questionnaire 2 Applied to the students

Finally, to close the presentation of the results obtained in this investigation, it is shown in the last graph an enhancement perceived by the students in terms of their acquisition of knowledge occurred as a consequence of their production of comics which was done autonomously using the help of ICTs.

CONCLUSIONS

The group analyzed in this investigation evidenced a positive impact on their reading and writing skills after the combination of their use of ICTs for making comics. After having received guidance and instruction by part of the researcher in her role as a teacher, the students were able to produce comics while strengthening their reading and writing skills through the use of ICTs as their main source of learning. The autonomy was implemented by the students for making comics and developing a reading and writing process in which they had to manage their progress and after evaluating with questionnaire 2 the achievements produced in those skills during the process. Having analyzed the results the researcher concluded that reading and writing skills were improved, that autonomy while learning can impact the knowledge of students positively, and finally, this investigation uncovered the weaknesses present in the students such as deficient grammar structure domain that could be the focus of future investigations that may use the strategy of comics to work and enhance that important area of the English language instruction.

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