



## **Pedagogical strategies and digital tools in online EFL classes. Enhancing the teaching-learning process**

*Estrategias pedagógicas y herramientas digitales en las clases en línea de Inglés como Lengua Extranjera. Mejorando el proceso de enseñanza-aprendizaje*

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### **ABSTRACT**

The adaptation to this new online modality due to the pandemic caused by COVID-19 has modified the lifestyle of all, causing that currently classes are mostly online, have to know and adapt to new platforms and tools before This, they were not used or were little known, but they have been very useful now, in addition to that they are presenting new updates every day, ensuring that they can be for the use of the general public. Each of these tools has been classified mainly by the use that they are given within the activities both inside and outside the academic hours, in order to explore the student's knowledge and provide feedback if necessary. The revision of concepts has been qualitatively analyzed in order to compare the different uses and benefits of each type of platform or technological tool used by students and teachers, in addition to a quantitative deepening. To carry out this study, the survey technique was used, collecting information from statistical data, having as objective, to know how many people use these tools, if they give them a good handling and if they serve as

support for the accompaniment during the virtual classes. This is a sample of 53 people, both university students and teachers, mostly belonging to the Technical University of Babahoyo, in the city of Babahoyo (Ecuador). Each application presents a use different or similar to each other, according to the group to which it has been classified, but what they have in common is that they are all of great help and support for these times in which people learn from home, and where everyday technology It allows us to open ourselves more to new knowledge that can continue to be polished with effort and dedication, by the student and having the teacher as a guide.

**Keywords:** technological tools, strategies, students.

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### **RESUMEN**

La adaptación a esta nueva modalidad online debido a la pandemia provocada por COVID-19, ha modificado el estilo de vida de todos, provocando que actualmente las clases sean mayoritariamente por vía online, teniendo que conocer y adecuarse a nuevas plataformas y herramientas que antes de esto, no se usaban o eran poco conocidas, pero que han sido de gran utilidad ahora, además de que están presentando nuevas actualizaciones cada día, logrando que puedan ser para el uso del público en general. Cada una de estas herramientas se las ha clasificado principalmente por el uso que se les da dentro de las actividades tanto dentro y fuera de las horas académicas, para así explorar el conocimiento del estudiante y realizar una retroalimentación si es necesario. Se ha analizado cualitativamente la revisión de conceptos con el fin de comparar los diferentes usos y beneficios de cada tipo de plataforma o herramienta tecnológica utilizada por estudiantes y docentes, además de una profundización cuantitativa. Para llevar a cabo este estudio se utilizó la técnica de encuesta, recolectando información a partir de datos estadísticos, teniendo como objetivo, conocer cuántas personas utilizan estas herramientas, si les dan un buen manejo y si sirven de apoyo para el acompañamiento durante las clases virtuales. Se trata de una muestra de 53 personas, entre estudiantes universitarios y docentes, en su mayoría pertenecientes a la Universidad Técnica de Babahoyo, en la ciudad de Babahoyo (Ecuador). Cada aplicación presenta un uso diferente o similar entre sí, de acuerdo al grupo al cual se lo ha clasificado, pero lo que tiene en común, es que todas son de gran ayuda y apoyo para estos tiempos en los que se aprende desde casa, y donde cada día la tecnología nos permite abrirnos más a nuevos conocimientos que pueden seguir puliéndose con esfuerzo y dedicación, por parte del estudiante y teniendo de guía al docente.

**Palabras clave:** herramientas tecnológicas, estrategias, estudiantes.

## INTRODUCTION

The great technological advances have allowed the man of today to expand his knowledge not only in books, but also in documents that are uploaded in the new existing virtual platforms on the internet, previously the internet was of great use and help, but not all people took full advantage of it, so a positive aspect of the pandemic was that it managed to cross borders and make people not only use it for entertainment, but also for academic use, because both schools and universities They have closed their doors due to the appearance of a new viral disease called COVID-19, which caused a global pandemic, causing all people to have to adapt to new changes and having to study from home. The English language is the most widely used around the world, so it is necessary to learn it despite the fact that in our country only the Spanish language is spoken, so new strategies must be analyzed and created that allow a better learning of the language. English to improve the quality of communication that will exist with other nations in the future.

Most of these tools present mini tutorials on how to use their platform, to be able to use it correctly, they are easy to use and do not present much science, since the objective of each one is to be fast, easy and innovative, to create better adaptation to the virtual world by students and teachers, each of these applications have similarities and differences, but working together they can make students more interested in learning the English language, if it is done creatively and ingenious, since, with practice, it is easier to acquire this language. According to a scientific article on the impact of technology in Ecuador, it says that television is a mass-moving medium, but that even so the internet predominates mostly in the young community, with which it is the one that is most frequently dealt with in university classrooms, so it is very important to try to reach them with one or another method that captures their attention, thus achieving a greater interest in using technology for learning and not only as a means of communication and leisure.

The inclusion of new technologies has significantly transformed social dynamics and the individual reach of people. Among all of them, the internet stands out as a platform for technological innovation in communication processes, where interaction in the digital environment is carried out by the population with access to it. In numerical terms, internet access reflects a phenomenon with an ever-increasing trend, and with it the benefits that the

technological revolution boasts in terms of economic growth and innovation, mainly associated with the digital economy. (Luque & Herrero, 2019)

### **Technological tools for virtual class connection and interaction.**

Different technological tools have been used since the beginning of the pandemic, some of them are:

- **Zoom**

Zoom is a cloud-based video conferencing service that you can use to virtually meet with other people, either by video or just audio or both, all while chatting live, and it allows you to record those sessions for later viewing.

These are the main features of Zoom:

One-on-one meeting: Host unlimited one-on-one meetings even with the free plan.

- Group Video Conferencing - Host up to 500 participants (if you purchase the "Large Meeting" add-on). The free plan, however, allows you to video conference for up to 40 minutes and up to 100 participants.

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- Screen Sharing - Meet individually or with large groups and share your screen with them so they can see what you see.

- Recording: you can also record your meetings or events. (Tillman, 2021)

- **Google Meet**

Google Meet is an application announced in March 2017 by the American company Google LLC. Also known as Hangouts Meet (because it comes from the classic Hangouts platform), it is a tool focused on the business environment and professional clients, capable of creating video conferences of up to 250 people and sharing documents and different file formats in real-time without limitations.

The fundamental characteristic of Google Meet is its interface dedicated to facilitating virtual and professional meetings, for this reason, it has proactive measures, anti-abuse, and encrypted videoconferences, which will guarantee a safe and professional experience for users.

Several of the most important features of Google Meet are:

- Offers high-quality video and audio for unlimited time.
  - Video conferences can be accompanied by instant captions, immediately transcribing the participant's voice.
  - Guarantees secure transmissions thanks to the fact that they are encrypted.
  - It is possible to choose the resolution of the incoming and outgoing video, modifying it according to the possibilities and tastes of the moment.
  - It is possible to share a screen with the other members of the meeting.
  - You can enter text into video conversations and by inserting certain codes you can display emojis.
  - Google Meet is an application designed especially for professional meetings, such as businessmen and academics.
  - Meetings can be scheduled through other platforms such as Gmail and Google Calendar.
- (MundoCuentas, 2021)

- **Microsoft Teams**

Microsoft Teams is cloud-based team collaboration software that is part of the Microsoft 365 and Office 365 suite of applications. The core capabilities in Microsoft Teams include business messaging, calling, video meetings, and file sharing. Businesses of all sizes can use Teams.

Some of the key features are as follows:

- Messaging chat. At its core, Teams is a chat-based collaborative workspace that features group and individual messaging with threaded and persistent conversations. Users can elevate a group or one-on-one chat to a voice or video call. Like other messaging services, Teams messages can incorporate emojis and GIFs (Graphics Interchange Format).
- Calling. Teams provide cloud-based telephony for voice calling. With the Teams app, users can make voice-over IP (VoIP) calls between Teams clients.
- Video meetings. In addition to audio-only calls, users can conduct virtual meetings. Amid the COVID-19 pandemic and work-from-home (WFH) directives, video conferencing adoption soared as people collaborated remotely. Teams offer some key video conferencing

features, such as customized virtual backgrounds, meeting recording, transcription, whiteboarding, and breakout rooms.

- Screen sharing. This older but critical capability is a common feature among team collaboration tools. As the name implies, screen sharing enables users to share their desktop screens, including files, in real-time during Teams calls or video meetings.
- Calendar. Teams, like Microsoft Outlook email, feature extensive calendaring so users can keep track of their workweek, meetings, and other daily appointments. The Outlook and Teams calendars are tightly integrated.
- File sharing. In this document management feature, remote teams can store, share, and edit files within Teams. Users can collaborate on the same document in real-time within Teams.
- Webinars. Microsoft Teams supports interactive meetings and webinars for up to 1,000 attendees. Features include live reactions and host moderation controls to disable attendees' chat, audio, and video. (O'Neill, 2021)

### **Technological platforms for academic activities**

- **Moodle**

It is an online educational platform that provides custom learning environments for students. Educators can use Moodle to create lessons, manage courses, and interact with teachers and students. Students can use Moodle to review the class calendar, submit assignments, take quizzes, and interact with their classmates.

Moodle is used by thousands of educational institutions around the world to provide an organized and central interface for e-learning. Teachers and class administrators can create and manage virtual classrooms, in which students can access videos, documents, and tests. Course chat allows students to communicate with the teacher and other students in a secure environment. (Tech terms, 2018)

Some of the features are as follows:

- Modern, easy-to-use interface.
- Personalized Dashboard.
- Collaborative tools and activities.
- All-in-one calendar.

- Convenient file management.
- Simple and intuitive text editor.
- Notifications.
- Track progress. (Moodle, 2020)

- **Microsoft Teams**

This platform was already described previously as a means of connectivity to virtual classes, but another of its functions is that it allows uploading documents of all kinds in the cloud belonging to Microsoft Office, in addition to uploading tasks assigned by the teacher.

Microsoft Teams integrates with many other applications in the Microsoft 365 and Office 365 suites, including Excel, OneDrive, PowerPoint, SharePoint, and Word. For added workplace productivity, Teams also integrates with apps outside the Microsoft domain, such as Box, Cisco WebEx, Meetings, and Zoom. Microsoft Teams App Studio enables developers and businesses to build custom apps that will work with Teams.

- **Google Forms**

Google Forms is free online software that allows you to create surveys, quizzes, etc. It's part of Google's web-based apps suite, including Google Docs, Google Sheets, Google Slides, and more. It's a versatile tool that can be used for various applications, from gathering RSVPs for an event to creating a pop quiz.

You'll need a Google account to create a Google Form, but you can adjust the settings so that anyone can fill it out, meaning no Google account is required. (Demarest, 2021)

Some of the features are as follows:

It's totally free

- Multiple users can create responses at the same time
- Easy to access from the cell phone
- No extra application is needed to enter the data
- It is entered with a link
- Friendly interface to respond
- Easy to see the results
- Easy to connect with Google Sheets to do advanced calculations with the answers

- We can expand the functionalities manually with Google Apps Script or through Plugins (Guzmán, 2021)

- **Edmodo**

Edmodo is an educational network that aims to provide teachers with tools to help them connect and communicate with their students and parents. Via the Edmodo app or website, teachers can share content, texts, videos, homework, and assignments with their students online. Online tools to help teachers administrate their classes have recently grown in popularity – they are known as Learning Management Systems (LMSs). (Zakime, s.f.)

Some of the features are as follows:

- Facilitate learning goals.
- Create polls for students.
- Award badges to individual students.
- Assess student progress.
- Online classroom discussions.
- Personalization.
- Free admin account activation.
- A network that connects students, administrators, and parents. (Compare Camp, 2020)

### **Technological platforms used in activities inside and outside the class session**

- **Wordwall**

Wordwall can be used to create both interactive and printable activities. Interactives are played on any web-enabled device, like a computer, tablet, phone, or interactive whiteboard. They can be played individually by students or be teacher-led with students taking turns at the front of the class. Printable can printed out directly or downloaded as a PDF file.

Wordwall activities can be used as student-completed assignments. When a teacher sets an assignment, students are directed to that one activity without the distraction of visiting the main activity page. This feature can be used in-class where students have access to their own devices, or as a way of setting homework. (Wordwall, s.f.)

- **Genially**

Genially is a media creation platform focused on designing and sharing media creations and presentations of all kinds. From the dashboard, students can start from blank or predesigned

templates organized into 12 types, including videos, infographics, interactive images, quizzes, and more. Students can work alone or collaborate with others to design presentations to fit an assignment's guidelines. (Rogowski, 2019)

- **Pear Deck**

Pear Deck is an interactive presentation tool used to actively engage students in individual and social learning. Teachers create presentations using their Google Drive accounts. Students log into the presentation with unique access codes and interact with questions while teachers monitor student and whole-class progress. Pear Deck is a freemium service; teachers and schools can access a wide array of tools and resources for free or opt to subscribe to a premium account. (EdSurge, s.f.)

- **Padlet**

Padlet is a place where you can create a single or multiple walls that are able to house all the posts you want to share. From videos and images to documents and audio, it is literally a blank slate. It's collaborative, too, allowing you to involve students, other teachers, and even parents and guardians. (Edwards, 2020)

- **PowToon**

PowToon is Web-based animation software that allows you to quickly and easily create animated presentations with your students by manipulating pre-created objects, importing images, providing music, and user-created voice-overs. PowToon is used by businesses to create engaging, creative presentations that capture attention and can be similarly used for educational assessment and content delivery. There is a free version available, as well as a paid subscription that allows for more features. (Mersand, 2014)

- **Loom**

Loom is video messaging for work. Combining the expressiveness of video with the Loom is a video messaging tool that helps you get your message across through instantly shareable videos. With Loom, you can record your camera, microphone, and desktop simultaneously. Your video is then instantly available to share through Loom's patented technology. (Loom, s.f.).

- **Educaplay**

It is a platform for the creation of Multimedia Educational Activities. It allows us to design our own online educational activities, among which are worth highlighting: crosswords, riddles, dictations, word searches, tests, interactive maps, relating, video quizzes, ordering words, presentations, collection, and dialogue.

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This virtual support is also characterized, apart from having the various activities, named above, which will help us to learn and enjoy playing, by facilitating the user to access educational resources based on the previous activities.

Another of the platform's utilities is access to participate and create groups in which to share work or activities. Thanks to the fact that this support has online games, users will be able to see the activities played and their scores in the rankings section. (Guinea, s.f.)

- **Edpuzzle**

Edpuzzle is an online video editing and formative assessment tool that lets teachers cut, crop, and organize videos. But it does so much more, too.

Unlike a traditional video editor, this is more about getting clips into a format that allows teachers to engage directly with students on a subject. It also has the capacity to offer assessments based on the content and offers lots of controls that allow for the use of video even in stricter school scenarios. The result is a modern platform that's engaging for students but is also very easy to use for teachers. (Edwards, 2021)

- **Edmodo**

This platform has already been described previously.

From the concepts previously described, it is understood that each platform has a different type of use and some are similar in certain aspects, causing each one to be useful in its own way, in different activities that can be assigned by the teacher.

## **METHODS**

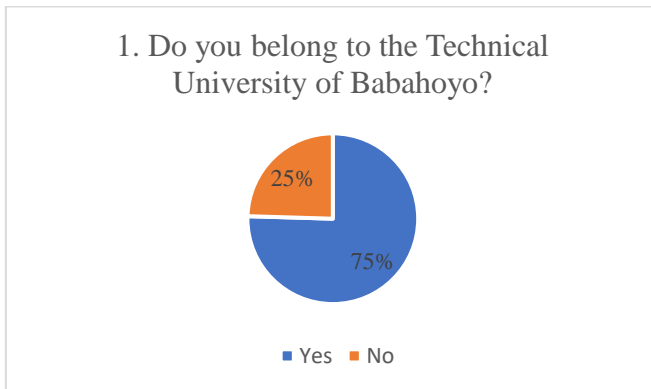
The internet and technological tools allow teaching methods to have a greater impact on students, compared to teaching without feedback. The revision of concepts has been qualitatively analyzed in order to compare the different uses and benefits of each type of platform or technological tool used by students and teachers, in addition to a quantitative deepening. To carry out this study, the survey technique will be used, collecting information from statistical data, having as objective, to know how many people use these tools, if they give them a good handling and if they serve as support for the accompaniment during the virtual classes. This is a sample of 53 people, both university students and teachers, mostly belonging to the Technical University of Babahoyo, in the city of Babahoyo (Ecuador). The questionnaire consists of 9 questions on the use and perception of the management of technological tools and platforms, allowing us to know which ones are used most frequently and the score given by each respondent, bearing in mind the importance of the object of study. Certain questions are configured according to a Likert scale. This scale is a structured instrument that will allow us to collect primary data, granting them a score per item.

The technological tools and platforms currently used have had a great use due to the pandemic that began in 2020, affecting all aspects of daily life, so they will be described from short reviews, they will be classified by type of use that they keep within this virtual modality.

## **RESULTS Y DISCUSSION**

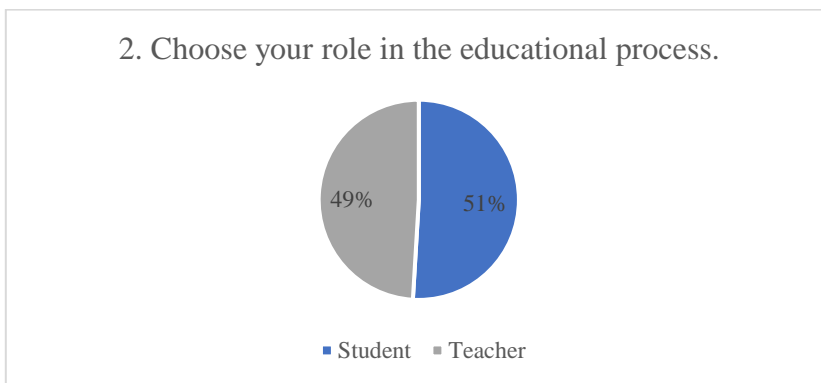
In the survey made to students and teachers, 53 responses were found, the first question tries to filter the respondents, according to whether or not they belong to the University of Babahoyo, obtaining the following data:

**Fig 1.** Statistics for question 1.

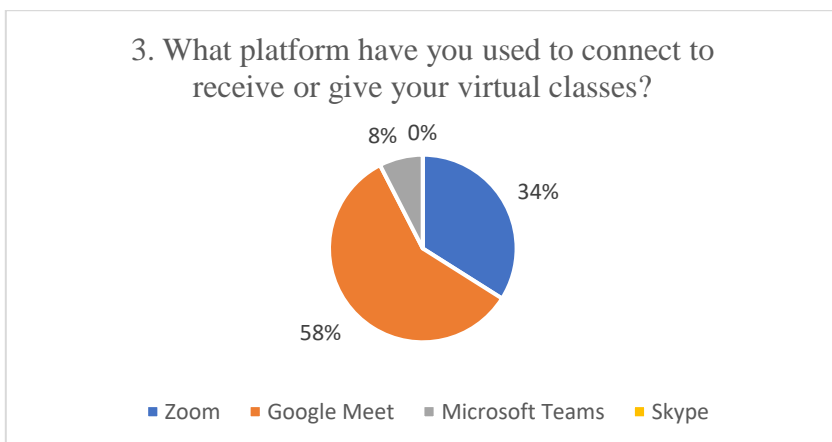


In the second question, the objective is to classify the respondents between students and teachers, where the following data is obtained:

**Fig 2.** Statistics for question 2.



The third question is based on obtaining data that classifies respondents according to the platform they use to give or receive virtual classes according to their role, obtaining the following data:



**Fig 3.** Statistics for question 3

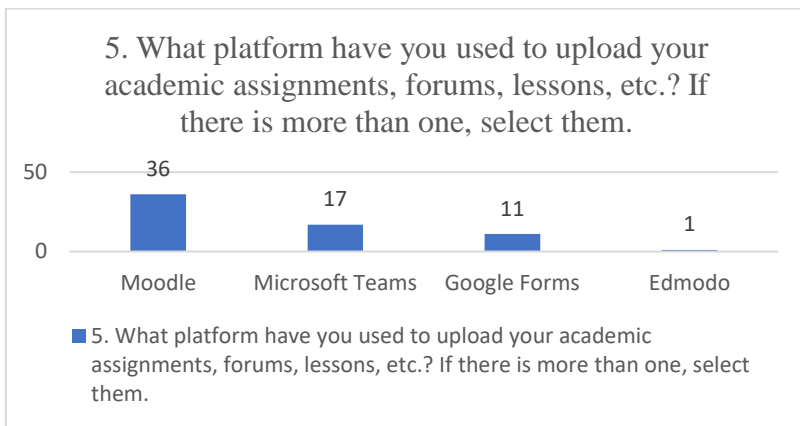
The fourth question filters the ratings that each user gives to these platforms, based on their experience throughout the pandemic.

**Table 1.** Question 4. Rate from 1 to 5 the experience of having used this platform, with 5 being the highest rating and 1 being the lowest.

Rate	No	Percentage %
1	0	0
2	0	0
3	11	20.8
4	17	32.1
5	25	47.2

The fifth question classifies the responses of the respondents according to the platforms they use the most to upload assignments, forums and carry out lessons that rate the progress of the student, it should be noted that many of the respondents use more than one platform, so they have the option to select more than one option. Where the following data is obtained.

**Fig 4.** Statistics for question 5



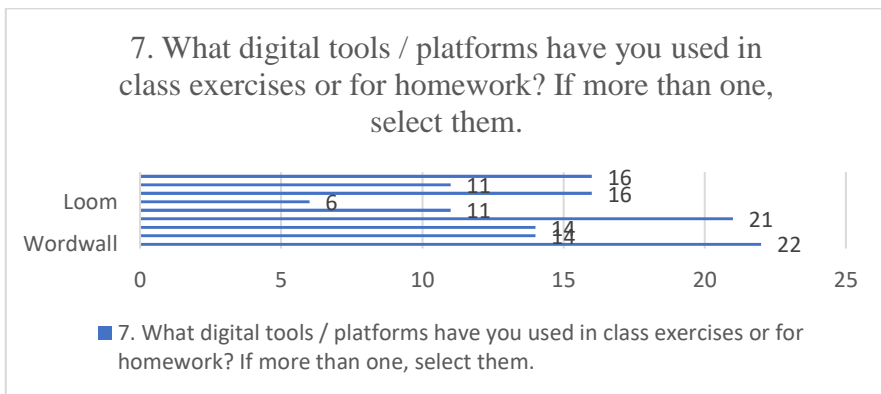
The sixth question filters the ratings that each user gives to these platforms, based on their experience throughout the pandemic.

**Table 2.** Question 6. Rate from 1 to 5 the experience of having used this platform / s, with 5 being the highest rating and 1 the lowest.

Rate	No	Percentage %
1	0	0
2	1	1.9
3	9	17
4	29	54.7
5	14	26.4

The seventh question tries to classify the applications that are most used by the respondents, taking into account that they use more than one, they are given the option to choose more than one option.

**Fig 5.** Statistics for question 7.



The eighth question ranks the ratings that respondents give to the experience they had using these platforms.

**Table 3.** Question 8. Rate from 1 to 5 the experience of having used this platform / s, with 5 being the highest rating and 1 the lowest.

Rate	No	Percentage %
1	2	3.8
2	0	0
3	6	11.3
4	25	47.2
5	20	37.7

Finally, the ninth question tries to collect information about the experience in virtual classes, both from teachers and students.

**Table 4.** Question 9. Please rate how difficult it was for you to adapt to these digital tools/platforms, with 5 being the highest rating and 1 being the lowest.

Rate	No	Percentage %
1	4	7.5
2	4	7.5
3	14	26.4
4	20	37.7
5	11	20.8

The close relationship that exists in the similarity that several of these platforms present, makes them all fulfill the same role, which is to produce the connectivity and interaction of students with teachers regardless of the institution in which they are, but taking into account that each of these will serve for the good learning of the student from the above explained by his teacher, since, it is necessary to practice the language in a way that facilitates the learning of this language that with effort and practice, it will be achieved greater fluency not only in writing but also in speech. Next, the statistical data obtained and the concepts that were previously argued will be discussed, due to the type of classification that was made.

Question number 3 is directly related to the concept of the Zoom, Google Meet, Microsoft Teams, and Skype platforms, making it known that the most used platform is Google Meet, since the University of Babahoyo works mainly with it, in addition to containing all the necessary functions that are needed within the classes, such as screen sharing, virtual whiteboard, in addition to being directly related to the other applications belonging to the Google company, also the survey shows that Skype is the least used, having 0 people have used it, since, by not presenting many relationships with other applications, it has lost strength, so it has been below the others.

Question number 5 is directly related to the concept of group B, which are the platforms for academic activities, having Moodle, Microsoft Teams, Google Forms, and Edmodo; making it known that the platform most used by the respondents is Moodle, since currently most higher education institutions have accepted it as a priority platform for online classes, since it has characteristics that make it a complete platform, since It allows assigning tasks and uploading them, creating forums, debates, plus lessons can be taken through this medium without the need to migrate to more platforms.

Question number 7 is related to the concept of group C, which is platforms used in activities inside and outside the class session, having Wordwall, Genially, Peardeck, Padlet, Powtoon, Loom, Educaplay, Edpuzzle, and Edmodo as the main tools used for the English language learning in students, showing that Wordwall and Padlet top the figures being the most used tools, taking into account that both can be used independently of the device, so it can be used on the web or as a mobile application, both work in a different way since Wordwall is used

mainly to create didactic lessons and Padlet to work simultaneously in real-time, where both the teacher and the students can interact, the other applications have also been used by several of the respondents, they present several types of uses since they allow us to create videos, mini-tests, and didactic games that will facilitate learning of the students.

Questions 4, 6, and 8 focus mainly on rating the experience of the respondents when using these technological platforms/tools, since the opinion of the public is necessary to obtain real recommendations from people who have already used them, in addition to it serves as a point of reference for more people who wish to use these platforms and require a reference.

Finally, question 9 refers in itself, to the difficulty that each respondent had in adapting to these tools, before the online mode, they were used very little, so at the beginning, it was a real challenge to use them, but with overtime, both students and teachers have adapted, thus achieving a better understanding and analysis of the topics presented in class, within and outside of academic hours.

These results, however, do not ensure that all people have the same difficulty using each of the platforms, since it depends a lot on the learning and adaptation capacity of each person, which is why it is necessary for teachers to be trained before using these applications, to give them a correct use and get the most out of it, together with the students this may be possible, thus achieving that the pandemic not only has a negative side but also a positive side in the aspect that many people have achieved. expand your learning within the technological world.

## **CONCLUSIONS**

As a consequence of the above, it is possible to indicate that technology has opened so many doors for us from the first moment it appeared, having a great impact in many aspects that have improved the quality of life of many people worldwide, these technological advances, have allowed an expansion of knowledge without limits or borders, in this investigative work it is announced that its use and management has expanded for the area of knowledge and understanding of new topics.

Therefore, the new strategies carried out by the teachers to improve the quality of teaching their students are bearing fruit, since, according to the statistics obtained in the surveys carried out for this article, it is known that the vast majority of students have already used



several of these platforms, giving them a score between 4 and 5, showing that they have had a good to very good experience using these tools, in addition to commenting that their level of and English has improved because there is better interaction with the teacher, making communication one-sided. In this case, the use that has been made of these tools has been to improve the level of English that the professionals of the future will have, opening the door to new challenges in their adult and work lives, the pandemic was only a door to enter the great world of knowledge, which previously they had not allowed themselves to experience.

## REFERENCES

- Compare Camp. (2020). Edmodo Review. Obtenido de Compare Camp: <https://comparecamp.com/edmodo-review-pricing-pros-cons-features/>
- Demarest, A. A. (22 de January de 2021). What are Google Forms? Everything you need to know about Google Workspace's online form builder. Obtenido de Insider: <https://www.businessinsider.com/what-is-google-forms>
- EdSurge. (s.f.). Pear Deck. Obtenido de EdSurge: <https://www.edsurge.com/product-reviews/pear-deck-product>
- Edwards, L. (19 de October de 2020). What is Padlet and How Does It Work for Teachers and Students? Obtenido de Tech Learning: <https://www.techlearning.com/how-to/what-is-padlet-and-how-does-it-work-for-teachers-and-students>
- Edwards, L. (17 de March de 2021). What is Edpuzzle and How Does It Work? Obtenido de Tech Learning: <https://www.techlearning.com/how-to/what-is-edpuzzle-and-how-does-it-work>
- Guinea, E. (s.f.). A- Descripción de EducaPlay. Obtenido de Educaplay: <https://sites.google.com/site/esterguineamontes/descripcion-de-educaplay>
- Guzmán, J. S. (29 de Julio de 2021). ¿Qué es Google Forms y para qué sirve? Obtenido de Juan S Guzmán: <https://juansguzman.com/que-es-google-forms-y-para-que-sirve/>
- Loom. (s.f.). What is Loom? Obtenido de Loom | Help Center: <https://support.loom.com/hc/en-us/articles/360002158057-What-is-Loom->
- Luque, A., & Herrero, N. (2019). Impacto de la tecnología en la sociedad: el caso de Ecuador. *Revista Universidad y Sociedad*, 11(5), 176-182. Obtenido de

[http://scielo.sld.cu/scielo.php?script=sci\\_arttext&pid=S2218-36202019000500176&lng=es&tlng=es](http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S2218-36202019000500176&lng=es&tlng=es).

Mersand, S. (12 de May de 2014). Product Review: PowToon. Obtenido de Tech Learning: <https://www.techlearning.com/news/product-review-powtoon>

Moodle. (03 de November de 2020). General Features. Obtenido de Moodle: <https://moodle.org/features>

MundoCuentas. (2021). Google Meet: qué es, cómo funciona y para qué sirve. Obtenido de MundoCuentas: <https://www.mundocuentas.com/google/meet/>

O'Neill, L. (March de 2021). Microsoft Teams. Obtenido de Search Unified Communications: <https://searchunifiedcommunications.techtarget.com/definition/Microsoft-Teams>

Rogowski, M. (December de 2019). Genially. Obtenido de Common Sense Education: <https://www.commonsense.org/education/website/genially>

Tech terms. (03 de March de 2018). Moodle. Obtenido de Tech terms: <https://techterms.com/definition/moodle>

Tillman, M. (15 de Febrero de 2021). ¿Qué es Zoom y cómo funciona? Además de consejos y trucos. Obtenido de Pocket-lint: <https://www.pocket-lint.com/es-es/aplicaciones/noticias/151426-que-es-el-zoom-y-como-funciona-ademas-de-consejos-y-trucos>

Wordwall. (s.f.). Features. Obtenido de Wordwall: <https://wordwall.net/es/features>

Zakime, A. (s.f.). What is Edmodo? Obtenido de What is ELT?: <https://www.whatiselt.com/single-post/2018/01/28/what-is-edmodo>