



# TECHNICAL UNIVERSITY OF COTOPAXI

## PUJILÍ CAMPUS

NATIONAL AND FOREIGN LANGUAGES PEDAGOGY ENGLISH MAJOR

### RESEARCH REPORT

**“EFFECTIVENESS OF THE USE OF TECHNOLOGICAL TOOLS IN LEARNING  
ENGLISH AS A SECOND LANGUAGE”**

Research report before obtaining the bachelor degree in National and Foreign language  
Pedagogy, English Major

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**MARCH 2022**

## **TUTOR'S ENDORSEMENT**

In my capacity as a supervisor of the research report entitled “**EFFECTIVENESS OF THE USE OF TECHNOLOGICAL TOOLS IN LEARNING ENGLISH AS A SECOND LANGUAGE**”, and researched by Nicole Milena Noroña Altamitano & Mirka Paola Vayas Haro, ID number 1727508200 & 1600568263, for obtaining the bachelor's degree in National and Foreign language Pedagogy, English Major.

### **I CERTIFY THAT:**

This research report has been fully revised and has the requirements and merits to be submitted for evaluation by the assigned revision Committee and its presentation and defense.

Pujili March, 2022



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## COMMITTEE APPROVAL

The research report entitled “EFFECTIVENESS OF THE USE OF TECHNOLOGICAL TOOLS IN LEARNING ENGLISH AS A SECOND LANGUAGE”, has been revised, approved and authorized for printing and binding, before obtaining the bachelor’s degree in National and Foreign language Pedagogy, English Major; this meets the substantive and formal requirements to hand in for the presentation and defense.

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## **GRATEFULNESS**

We are grateful to our parents for guiding and supporting us in our academic formation, for cultivating in us values that have helped us to be honorable and respectful people. In addition to becoming proficient professionals.

To Technical University of Cotopaxi and its trained and ethical teachers for the teaching and knowledge imparted during our professional learning process, for forming us as humanistic and quality professionals, capable of generating scientific knowledge through research.

***Mirka & Nicole***

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I dedicate this research to my entire family, especially to my mother, Margotd Haro, who was my inspiration, my best friend and support during this university career. To my siblings, Marjuri Vayas and Carlos Caiza, who accompanied me in every step, advised me, motivated me, helped me, and guided me to become a better person and a competent professional.

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*Mirka*

## **DEDICATION**

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*Nicole*

**TECHNICAL UNIVERSITY OF COTOPAXI**

**PUJILÍ CAMPUS**

**NATIONAL AND FOREIGN LANGUAGE PEDAGOGY ENGLISH MAJOR**

**THEME:** “THE EFFECTIVENESS OF THE USE OF TECHNOLOGICAL TOOLS IN LEARNING ENGLISH AS A SECOND LANGUAGE”

**Authors:**

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**ABSTRACT**

The change of modality in education has had a great impact for both students and teachers, thereby today it is necessary to know about technological tools and their contribution to the teaching-learning process during virtual classes. This research aimed at analyzing the importance of training in the use of technological tools in the learning of English for students in the fifth semester of the Pedagogy of National and Foreign Languages course at the Technical University of Cotopaxi. In addition, this research has a qualitative approach because it is focused on the description of the students' perspectives regarding the effectiveness of technological tools and the blended learning method. The technique applied was the survey and the instrument was the questionnaire which consisted of sixteen open and closed questions with a Likert scale. These questions allowed the researchers to collect information from each of the students because they were designed to investigate their experiences on the effectiveness of technological tools during virtual classes. The findings obtained were transcribed, coded, segmented and graphed. The main findings showed that the application and training of technological tools for teachers and students during virtual classes is an important factor in helping the learning of a second language such as English. Students can interact in a dynamic way with their teacher, which also benefits them during the development of their English skills such as speaking, reading, writing and listening in an easier and faster way. Likewise, technological tools can act as a support for teachers by attracting the students' attention and motivating them to learn.

**Keywords:** Blended learning, education, effectiveness, technological tools, virtual classes.



# UNIVERSIDAD TÉCNICA DE COTOPAXI

## EXTENSIÓN PUJILÍ

### PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS INGLÉS

**TÍTULO:** “LA EFICACIA DEL USO DE HERRAMIENTAS TECNOLÓGICAS EN EL APRENDIZAJE DEL INGLÉS COMO SEGUNDA LENGUA”

**Autores:**

Noroña Altamirano Nicole Milena

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#### RESUMEN

El cambio de modalidad en la educación ha tenido un gran impacto tanto para los estudiantes como para los docentes, por lo que hoy en día es necesario conocer las herramientas tecnológicas y su aporte al proceso de enseñanza-aprendizaje durante las clases virtuales. Esta investigación tuvo como objetivo analizar la importancia de la capacitación en el uso de las herramientas tecnológicas en el aprendizaje del inglés para los estudiantes del quinto semestre de la carrera de Pedagogía de las Lenguas Nacionales y Extranjeras de la Universidad Técnica de Cotopaxi. Además, esta investigación tiene un enfoque cualitativo porque se centra en la descripción de las perspectivas de los estudiantes respecto a la efectividad de las herramientas tecnológicas y el método de aprendizaje semipresencial. La técnica aplicada fue la encuesta y el instrumento fue el cuestionario que consistió en dieciséis preguntas abiertas y cerradas con escala Likert. Estas preguntas permitieron a los investigadores recoger información de cada uno de los estudiantes, ya que estaban diseñadas para investigar sus experiencias sobre la eficacia de las herramientas tecnológicas durante las clases virtuales. Los resultados obtenidos fueron transcritos, codificados, segmentados y graficados. Los principales hallazgos mostraron que la aplicación y capacitación de herramientas tecnológicas para profesores y alumnos durante las clases virtuales es un factor importante para ayudar al aprendizaje de una segunda lengua como el inglés. Los estudiantes pueden interactuar de manera dinámica con su profesor, lo que también les beneficia durante el desarrollo de sus habilidades en inglés como hablar, leer, escribir y escuchar de una manera más fácil y rápida. Asimismo, las herramientas tecnológicas pueden servir de apoyo a los profesores atrayendo la atención de los alumnos y motivándolos para el aprendizaje.

**Palabras clave:** Aprendizaje combinado, educación, efectividad, herramientas tecnológicas, clases virtuales.

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## 1. GENERAL INFORMATION

**Theme:**

“The effectiveness of the use of technological tools in learning english as a second language”

**Starting Date:**

March 2021

**Ending Date:**

March 2022

**Place of Research:**

San Felipe-Latacunga-Latacunga-Cotopaxi-zona 3-Universidad Técnica de Cotopaxi

**Sponsoring Faculty:**

Pujilí Campus

**Sponsoring career:**

National and Foreign Language Pedagogy

**Linked Research Project:**

Learning and Technological tools

**Research Group:**

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**Knowledge area:**

Education

**Research line:**

Education, communication and design for human and social development.

**Research line of the career:**

Innovation in the teaching and learning of English as a foreign language.

**Keywords:**

Blended learning, education, effectiveness, technological tools, virtual classes.

## 2. PROBLEM STATEMENT

The research problem is that at UTC English students, the change of modality to virtual classes in higher education could not have a thorough development of the basic English skills such as listening, speaking, writing, and reading through technological tools due to lack of training in the use of technological tools to improve their English language. For instance, Hernandez et al. (2017), adds that there is too much work to do for correct use of technologies in virtual classrooms due to the technological tools used by students are majority used for social aspects rather than academic purposes. Moreover, findings indicate that teachers' well-equipped preparation and capacitation with ICT tools facilities is one of the main factors in the success of technology-based teaching and learning processes (Ghavifekr and Wan, 2015). Technological tools were effective in teaching and learning English, as well as improving oral expression and listening comprehension. These tools help effectively to teach and learn a second language and to improve their skills (Zhao, Gómez, and Llorente, 2019). In other words, the relation between education and technology has been something effective in educational context because it provides them all necessary tools to a better learning and teaching virtual class and also improves the possibility of acquiring a second language with positive results. In addition, Parupalli (2019), mentions:

It is a well-known fact that technology is very useful for the teachers as well as the learners to develop their teaching and learning skills of English. Without technology, it will become a great problem for the teachers to motivate or influence the learners to learn the language skills (p. 60).

In this respect, this research will benefit UTC students and teachers of Pedagogy of National and Foreign languages (English) career who can take advantage of this research to take into account the main technological tools that students prefer to enhance their English skills and its importance. That's why, the research question of this investigation is: What is the effectiveness of the use of technological tools in learning English as a second language of the fifth semester of

the Pedagogy career in National and Foreign Language of the Technical University of Cotopaxi through the blended learning method during virtual classes?

### 3. OBJECTIVES

#### 3.1 General

To analyze the importance of training in the knowledge of the use of technological tools in the learning of English of the students of the fifth semester of the Pedagogy career in National and Foreign Language of the Technical University of Cotopaxi through the blended learning method during virtual classes.

#### 3.2 Specific objectives

- To categorize the technological tools used by fifth semester students in virtual English classes.
- To determine the importance of technological tools to assist students' second language learning.
- To suggest the use of technological tools through blended learning method for second language learning.

### 4. ACTIVITIES AND TASK SYSTEM IN RELATION TO THE OBJECTIVES PROPOSED

*Table 1. System of Tasks in Relation to the Objectives Set out*

<b>Specific objective</b>	<b>Activities</b>	<b>Verification Means</b>
To analyze the technological tools used by fifth semester students in online English classes.	<p>Researchers will collect data through a survey</p> <p>Researchers will code and translate student responses.</p>	<p>Survey</p> <p>Questionnaire</p>



	Researchers will analyze de results.	
To determine the importance of technological tools to assist students' second language learning.	<p>Researchers will apply a survey to determine the different technological tools that students use during online classes in fifth semester students.</p> <p>To identify the most innovative and motivated technological tools.</p>	<p>Survey</p> <p>Questionnaire</p>
To suggest the use of technological tools through blended learning methods for second language learning.	<p>Researchers will share the main finding to the teacher to implement technological tools.</p>	<p>Findings obtained from the analyses carried out during the project</p>

Note: The four objectives are described, each with their activities, results and means of verification, carried out during the project.

Done by: Noroña, N., & Vayas, M., (2021).

## 5. JUSTIFICATION

This research was done with the purpose of demonstrating the importance of teacher training in the knowledge of the use of technological tools in learning English through the blended learning approach during the online classes. Likewise, it seeks to analyze the effectiveness of the use of technological tools in the learning of English from the perspective of fifth semester students of the PINE in online classes due to virtuality and the implementation of technology in actual education. Furthermore, the present research has to determine the importance of technological tools to assist students' second language learning and recognize the technological tools used by fifth semester students in online English classes through a survey.

The beneficiaries of the research are mainly the fifth semester students of the PINE career who will be able to obtain more information about the technological tools and it will allow students to use the technological tools in an appropriate way in order to support them in learning the skills of speaking, listening, reading and writing, while the indirect beneficiaries are the teachers, who will be supported by the perspective of the students taking into account their weaknesses so that they can implement the appropriate technological tools so that their use is the most practical and better results can be obtained.

It is important to take into account that technological tools are essential for learning English as a second language. Therefore, it is necessary to implement the use of technological tools related to a methodology which can be effective for the students' learning of a second language. A different approach to teaching English is blended learning because it is linked to learning through technology so that online education can be adapted to today's education. Munaiseche and Pontoh (2021), mention that blended learning is necessary for 21st century learners because it is the combination of online learning and collaboration that learners can use through their cell phones where they can easily get information and download applications with the purpose of helping them in learning English, their active communication, quality and skill.

Therefore, the analysis of the effectiveness of technological tools during online classes is fundamental to observe how students have had to adapt, learn to use and take

advantage of technological tools in order to acquire all the necessary knowledge and the correct development of their English skills. It supports the career of Pedagogy of the National and Foreign Language (PINE), fifth semester students, with innovative purposes and helps to facilitate the acquisition of English as a second language through technological tools. Likewise, changing traditional classes for more interactive, didactic and innovative ones that help the development of students' skills.

## 6. SCIENTIFIC AND TECHNICAL FOUNDATION

### 6.1 Background

Previous research done by Ghavifekr and Wan (2015) which studied the effectiveness of ICT integration in schools to analyze teachers' perceptions on effectiveness of ICT integration to support teaching and learning processes in the classroom. A sample of 101 teachers from 10 public secondary schools in Kuala Lumpur, Malaysia was used for this investigation. The authors applied a survey questionnaire with a total of 43 items that was used as the main instrument in this study. The data for this quantitative research were analyzed for both descriptive and inferential statistics using SPSS software. The results indicate that ICT integration has a great effectiveness for both teachers and the students. Findings indicate that teachers' well-equipped preparation with ICT tools and facilities is one the main factors in success of technology-based teaching and learning. The authors indicate that the application of technology in the learning environment changes the way of teaching and learning with excellent results.

Mbuva (2015) also investigated the effectiveness of online technological tools for teaching and learning to examine the effectiveness of educational technological tools for online teaching and learning and the challenges that lay ahead. The participants used in this research were teachers and students. The study employed a "narrative research" method which takes the interpretive/constructivist and narrative inquiry, the interpretive/constructivist research paradigm, document reviews, interpretation of human experiences and construction of reality as presented varied by online education studies. The results of the study show that online education has grown over the years and schools are working hard to keep up with the various Learning Management Systems (LMS). The authors demonstrated that education is trying to grow through online learning to enhance educational purposes.

In addition, Zhao, Gómez, and Llorente (2019) employed technological tools to investigate the influence of virtual learning platforms for university students in their English learning as a second language. The participants were 144 second-year English major students coming from the Faculty of Foreign Languages in Gansu Agricultural University in China. The researchers first applied an anonymous questionnaire which was divided into three parts: Personal information, the use of new media technology and the study about English learning. This questionnaire was formed

by Likert type scales, it also included open, closed questions and with the prescriptions "yes" or "no" depending on their real situation. The results showed that technological tools were effective in teaching and learning English, as well as improving oral expression and listening comprehension. The authors showed that technological tools help effectively to teach and learn a second language and to improve their skills.

Equally, a study done by Hussain, Iqbal, & Akhtar (2010) about technology-based learning environment to determine the effectiveness of technology-based learning environment on student achievement in English as a foreign language. The sample of the study was 90 students of 10th grade of a public school located in Islamabad which consisted of 90 male students of grade XI studying at Federal Government Postgraduate College. The author did a pretest- posttest equivalent group design was used to compare the achievement of the two groups. A Pretest and a posttest containing 50 items each from English textbook were developed and administered. The collected data were statistically analyzed. The results showed that there was a significant difference between the mean scores of the Experimental group and the Control group. The performance of the Experimental group was better on posttest scores that indicated that teaching through technology-based learning environments enhanced the achievement level of the students. On the basis of the results, it was recommended that teaching and learning through information and communication technologies may be adopted to enhance the language learning capability of the students.

Finally, Hernandez, García, Ochoa & Sang (2017) also analyzed the use of technologies in second language learning to study the extent to which students take advantage of the use of technology for academic purposes and engage themselves in learning English as a second language. A sample of twenty five percent of English language students (375 students) were considered. Students' average age was 18-25. Two instruments were used to gather data, the first one a questionnaire designed for this purpose, the second one an interview to know what kind of gadgets students use to learn English in higher education and how this technology could be introduced in second language learning classrooms. The results indicated that the most technological gadgets used by students were Cells and Laptops to surf the net and chat through social networks for non-academic issues and laptops and desktop computers to work on school duties with specific software. Moreover, this short study reveals that there is too much work to do for the use of

technologies in virtual classrooms. The authors concluded that the technological tools used by students are majority used for social aspects rather than academic purposes.

## **6.2 Theoretical Framework**

### **6.2.1 Education**

According to Bhardwaj (2016) education should not only focus on a synthetic concept of learning but teachers have to focus on ensuring the transmission of their knowledge based on values that guarantee a successful education with principles so that good caregivers can be formed. Moreover, thinking, feeling and behaving well are some of the factors that education provides us with, thus contributing to the successful development of a person and society as well as allowing us to develop human personality, individual thoughts and also our social skills, therefore preparing people for different life situations and creating a status in society, where the person decides to settle because having a quality education can give the individual self-confidence and also be able to play an important role in the development of society (Al-Shuaibi, 2014).

Education is an important factor for the development of a society with values and principles. Education besides focusing on transferring knowledge must focus on encouraging values and principles in their students, forming their minds to be critical and researchers, who try to build their own knowledge, it is also essential that teachers motivate their students to improve every day and guide them to build their own concepts through appropriate methodologies for learning and thus create successful individuals who help the development of the country and having the ethics and values as a professional.

### **6.2.2 Innovative education**

According to Yarmatov and Ahmedova (2020), many teachers have had to modernize and update the educational system for a good development of learning because it is in a constant development where teachers must innovate and improve their skills together with a new teaching methodology in their classes by introducing technology and creating innovative projects to develop principles of individualization of the educational process and step-by-step education of students. Furthermore, the change towards virtuality

has been one of the biggest challenges for education in recent times because both students and teachers were not up to date with virtuality, however education is a system that is advancing every day where teachers and students must be ready for changes and adapt to them for better learning

### **6.2.3 Teaching Learning Process**

According to Munna and Kalam (2021), the learning process is defined as the transfer of information and knowledge that takes place between the teacher and the student where the teacher exposes his knowledge to help the student to build his own, defining his methods and objectives in order to develop a favorable learning process through the implementation of strategies within the teaching process. In addition, Singh and Mishra (2017) mention that nowadays the teacher does not only dictate the class and the students listen, but it also goes further where the teacher becomes a guide for the student helping him to create his own concepts and knowledge, the teacher being a guide tries to focus on the needs and difficulties that the student presents thus helping in optimal learning development.

### **6.2.4 Blended learning**

The new educational modality has implemented blended learning in education because it has supported the teaching and learning process to also improve second language learners with the acquisition of it. “The simplest definition of the term blended learning is the use of traditional classroom teaching methods together with the use of online learning for the same students studying the same content in the same course” (Wilton and Innes, 2018). Moreover Picciano, Dziuban and Graham, 2014 argued:

Blended learning, which combines the strength of face-to-face and technology enhanced learning, is increasingly being seen as one of the most important vehicles for education reform today. Blended learning allows both teacher and learner access to radically increased possibilities for understanding how we transmit and receive information, how we interact with others in educational settings, how we build knowledge, and how we assess what we have taught or learned (p. 2).

Moreover, blended learning has helped to educational purposes with open educational opportunities in all fields with a variety of information, also the combination of technology with education allows you to establish a creative environment, expand the boundaries of education and establish a creative environment (Viacheslavna and Anatolievna, 2020).

### **6.2.5 Advantages of blended learning**

Some of the advantages of blended learning is that it supports teachers to have more dynamic material to represent the topics in a better way with proper illustrations, also it encourages students to work individually through motivation because it provides both teachers and learners with comprehensive input and output including learning skills, it means that learners can get the right information in a short period of time with self confidence in what they are learning (Parupalli, 2019).

### **6.2.6 Technological tools**

Passmore (2020), said that technological tools refer to the internet, software, device, or app that is used to develop or support online course content. The content can include blogs, authoring tools, wikis, smartphones, laptops, and others, also technological tools include web 2.0 which is available on the internet or the world wide web. In addition, technological tools encompass all the forms of technology that are used to store, create, transmit, display, share or exchange information; these technologies were designed to mainly support education (Alkamel & Chouthaiwale, 2018).

### **6.2.7 The role of technological tools**

Technology has a significant role to support and enhance language learning; the effectiveness of any technological tool depends on the knowledge and experience of the language teacher who manages and facilitates the language learning environment (Patel, 2017). Technology is gaining a significant amount of attention due to the increasing use of new technological tools, which allow us to achieve more in less time and also due to our increasingly connected world. Learners are increasingly willing to use new technological



tools such as tablets and apps that are transforming English language teaching (Diallo, 2014). Other authors have also argued that:

The technological tool will be a key element that helps the development of different activities that favor the desired result and the improvement of the teaching-learning process of a second language. The use of technological tools is increasingly used by the demand of the global environment at the same time. One of the main reasons why I chose this topic is because of the tendency that everyone studies a second language and the need to improve the quality of education in our current society (Zhao et al., 2019, p. 32).

Furthermore, according to Costley (2014), technology plays an essential role in society and for this reason it has become a priority in teaching and learning and it is necessary to be up to date in this aspect, essentially teachers are trained in the use of technological tools and authorities motivate teachers to explore technology not only as tools but also as concepts and ideas that facilitate learning. Technology is becoming more and more indispensable in education and it is necessary that individuals are able to use these tools in a way that they can take advantage of their full potential. These can also be used to improve the performance of students because they are dynamic tools that help keep the attention of students in learning. Therefore, communication between teachers and students has been improved due to the use of technological tools as this type of learning is helping students to learn English autonomously and a factor that has influenced students to be motivated to learn English is the possibility of thinking not only as a receiver but also as a sender within their learning in a technological environment (Zhao et al., 2019).

### **6.2.8 Technological Tools in higher education**

According to Liesa et al. (2020) the higher education has been progressively changing by educational activities based in technology which has propitiated the start of an educational transformation of the traditional university through new pedagogical models and the action of teachers capable of providing the students with main educative resources, developing their skills and abilities. The use of technology inside the university classes has the potential of stimulating collaborative and cooperative learning, dynamics, interpersonal communication among students, creation of teaching-learning communities,

and also the design of new teaching models in which students can share information for their own interest (Liesa et al., 2020). Based on Bernaola et al. (2020) mentioned that:

The different universities must first carefully analyze all the factors and situations presented by those involved in virtual education, so that they can have better control of activities such as assessment, tasks, forum, correct use platform Moodle, and the zoom video conferences that will be carried out, implementing different methodological systems in the training of teachers, since the central focus must be taken into account for the correct virtual education, advice to teachers and students, to teach them the proper use and implementation of the different tools that can be established in your classes and you can give a good evaluation with the use of these tools (p. 419).

### **6.2.9 Importance of technology in Second Language acquisition**

Nowadays, it is important to consider that it is necessary to implement technology in the classroom to develop students' English skills dynamically and engagingly. Moreover, this might also lead to increased student participation in the classroom. According to the School of Education (2020), the health emergency demonstrated that online education is an essential part of teaching and learning. Integrating technology into teaching should be necessary because it is a powerful tool that can generate interest in learners. Furthermore, Diallo (2014) mentions that learners have benefited from technological tools as they are helping especially ESL learners to improve their skills through a wide range of new software and hardware devices. In addition, Diallo (2014) mentions:

Krashen's theory outlined the need for ELLs to have rich comprehensive input perceived as a comprehensible message that motivates the learner to acquire the language faster than the traditional teaching method. Technology tools, as rich and comprehensive input, help achieve all of the following: Motivation: high motivation is conducive to better language acquisition. Self-confidence: self-confidence leads to better language acquisition. Decreased anxiety: low anxiety leads to better language acquisition (p. 35).

Learners have been able to develop skills and become more proficient because the technological tools are effective and are developed in an environment where technology

drives student learning, as opposed to traditional methods that seek to memorize rules in an environment that is stressful for students (Diallo, 2014).

#### **6.2.10 The effectiveness of technological tools in second language learning**

Two experiences allow us to identify the effectiveness of technology tools within the classroom. Based on Zhao et al. (2019), technology is a tool that functions as a support in teaching-learning a second language due to it has helped both professors and learners to improve their communication in class where students can also develop autonomous learning. Moreover, the integration of these tools produces motivation in students to put more effort into language learning. Furthermore, Ghavifekr & Rosdy (2015), said that technology integration within the learning process has an excellent impact and effectiveness for students and teachers. Also, the teachers need to be well equipped with technological tools to facilitate teaching and learning because it plays an important role in enhancing students' quality of learning. Based on Alkamel & Chouthaiwale (2018) mentions:

The methodologies are interlinked with the novel technologies to teach English language, it seems impractical to keep them apart. With the help of these ICT tools which are available freely on the internet, can make the second language teaching a fruitful one. It becomes beneficial for teaching a foreign language in the hands of creative and knowledgeable language teachers. Now ELT has come into the period of evaluation where new inventions are entering into our day-to-day activities. The elements which are aforementioned are making impacts in the pathway of learning particularly in the English language teaching. Thus, it is shown that ELT has evolved to a greater extent due to the influx of technologies (p.32).

#### **6.2.11 Advantages of using technological tools**

Nowadays the traditional way of teaching and learning has changed due to the global pandemic technology knowledge. That is why the traditional classroom where the teacher-student interaction was the main aspect within a class has been substituted by a device or application which helps students feel more comfortable. In this new educational model, the teacher has adopted a new manner of teaching where the technological tools assist the teaching-learning process facilitating the acquisition of knowledge shared by the teacher.

In addition, there is a lot of evidence that mentions that technological tools in second language learners at university level increase language improvement because students show more interest specifically in the classes where technology is applied as a primary resource than those that use the traditional methods (Bonilla and Espinoza, 2014).

Moreover, Mbuva (2015), also adds that technology undoubtedly provides an effective learning environment where students are the focus.

#### **6.2.12 Disadvantages of using technological tools**

There are main disadvantages of using technological tools in online learning. According to Kumar (2018), although technology has been a useful tool in recent times, it has also been one of the biggest challenges for teachers because if they are not trained or properly instructed, they may have problems to take advantage of the full potential of technological tools since their use requires sufficient knowledge so that they cannot intervene in virtual teaching. In addition, schools have had to adapt to a new model of education that had not been contemplated in previous years and that had to be incorporated today so that all students continue in their learning process, however many schools were not ready for this change, which caused that they do not have a good learning development and many students fail to obtain the necessary knowledge for their level (Arkorful and Abaidoo, 2015). Coman et al. (2020) mentioned that another disadvantage is that technology could not handle unexpected situations of its users and respond effectively to their questions as teachers. The poor interaction between computers and users can affect good learning.

#### **6.2.13 Types of technological tools used by students learning language**

Based on Eady & Lockyer (2013),

Technology has changed a lot in the last decades. The increasing variety and accessibility of technology have expanded the toolbox and opportunities for teachers to use it. Computing devices are more powerful and come in different forms, from those on our desks to those in the palm of our hands. The Internet connects these devices and connects learners in the classroom, across the school, and around the world (p.5).

Technological devices and networks have changed our schools and classrooms. Some of the technological tools which have been used during the virtual classes are the following:

**Nearpod:** This application is very useful for both teachers and students because teachers can monitor the progress and completion of activities during classes, so that teachers can evaluate and obtain the results presented in the application. And students can solve activities in a dynamic and active way.

**Flipgrid:** Using this tool helps students in their speaking skills because they can make videos or audios where they can record themselves. It is also very useful and practical for teachers because they can assign discussion questions to students and students can record their answers.

**Google classrooms:** It has been one of the most used tools in virtual classrooms due to the pandemic, this application is specifically for teachers and students because it is a platform where classes and folders are created where tasks are assigned to students with time limits and students can create or upload documents as homework to this platform.

**Kahoot:** It is a highly interactive tool for both children and college students as they have the same structures of activities simply modifying the information, this application has interactive activities where students test their knowledge, teachers create questions of different types with specific answers where students will have to choose and add points to get a final grade also taking into account the time.

**Lyrics Training:** This technological tool focuses on the development of listening and writing skills, the use of this application is intuitive which is favorable for use in beginners and advanced students, you can select the level and how to develop the activity as it has two functions where the student selects whether to practice their writing or listening through different videos.

**Wordwall:** It presents creative activities created by different users where different topics are tested, the application has different models of questions, test and activities where the user can edit to create your activity, once created the activity you get the link and this can be easily shared with anyone, a great advantage of this application is that you do not need an account.

## **7. METHODOLOGY**

This research is qualitative because it focuses on describing the students' perspective about the importance of training in technological tools to improve English skills during the virtual classes through a blended learning. The instrument used was the survey which consisted of a questionnaire of sixteen open-ended questions. The students could write their own opinions-perspective about Technological Tools in the three open questions and choose the best options in the thirteen close questions where researchers applied Likert scale of nominal data which represents categories without numerical representation. Category A is about the effectiveness of technological tools with five items such as "very satisfied" "satisfied" "neither" "dissatisfied" "very dissatisfied" and for categories B and C also were applied five items such as "strongly agree" "agree" "undecided" "disagree" "strongly disagree" about personal opinions. The survey was sent through google forms to the 42 students of A and B who were taken as a sample. This survey was adapted from the research of Zhao, Gómez, and Llorente, 2019. Moreover, this research is descriptive because researchers transcribed, graphed and coded all data collected from the survey. It allowed researchers to investigate the importance of training about technological tools for students' improvement in English Language.

### **7.1 Sample and site**

This study was conducted at the Technical University of Cotopaxi focusing on the 42 students of the fifth level A and B of Pedagogy of National and Foreign Languages career. For this study, as a sampling approach for selecting participants, research selected the purposeful sampling because it allowed researchers to intentionally choose the individuals and sites to learn or comprehend the main phenomenon (Creswell, 2012). In this kind of sampling, "The standard used in choosing participants and sites is whether they are information rich" (Patton as cited in Creswell, 2012, p. 206). According to this approach, the sampling technique selected is a homogeneous sampling technique which permits researchers to select a group of students with experience in learning a second language during the new educational model (online classes). Homogeneous sampling allowed researchers to choose certain people or sites because the subjects of study are similar in traits or have similar characteristics (Creswell, 2012). Therefore, researchers

purposefully included a sample of English as Second Language Learners of the fifth semester of Pedagogy of National and Foreign Languages career who had experimented with the effectiveness of the application of technological tools in learning a second language. This research was developed from deductive to inductive method because the researchers first verified the observed phenomenon in a general way and then analyzed the subject in a particular way.

## **7.2 Data gathering strategies**

### **7.2.1 Survey**

According to Avedian (2014) the survey is used as a method in which information can be obtained from a sample with the objective of constructing quantitative descriptors of a larger population than the one taken, they are also performed for the collection of information that reflects aspects of a population that are sought and that cannot be observed directly. Additionally, Young (2015) states that the main aim of a survey is to provide the opinions and perspectives of a group of people as a sample for further analysis. They are conducted through questionnaires that may consist of open and closed questions that will help researchers analyze the population to be investigated and are very often used to determine about behaviors, attitudes or opinions, to design a survey he mentions that it is usually recognized that samples can be smaller, although given the nature of the statistical analysis used, it is usually better if they are larger. Also, Ponto (2015) mentions that this type of method allows recruiting varied participants and allows the research to have possibilities of using quantitative research strategies, qualitative research strategies or both strategies as is the mixed methods, this will depend on the questions that are made within this and the design that these have, in order to collect data detailing who to include, what and how to distribute, in order to ensure a research process and a high-quality result.

## 8. ANALYSIS AND DISCUSSION OF RESULTS

The data analysis was carried out with a qualitative approach. The sample taken to conduct the research was 42 fifth-semester students of the Pedagogy of national and foreign languages career at the Technical University of Cotopaxi-Pujilí. The researchers provided the students with a survey, which consisted of open and closed questions based on different aspects of technological tools and their use. Likewise, all student responses were analyzed and discussed. In addition, the survey allowed the researchers to collect data during the research phase. The data is based on the fifth-semester students' perspective on technological tools in online classes. Moreover, researchers used a table of categories and subcategories to analyze the open questions.

**Table 2.** *The effectiveness of the use of Technological Tools in learning English*

<b>Categories (themes)</b>	<b>Subcategories</b>
A) Online learning	Technological tools Learning support
B) Learning preferences	Activities and use Technological Value
C) Students' participation	Advantages Disadvantages

Resource: Students of fifth semester of PINE career

Elaborate by: Noroña, N., & Vayas, M., (2022).

Thus, the survey was administered to the research sample where the parameters observed focused on several components such as online learning, learning preferences, students' participation, and student experience in learning English as a second language, with a total of 16 questions, and the results obtained were as follows:

- 1. What do you know about technological tools? Select the correct answer.***



**Table. 3.** Knowledge about Technological Tools

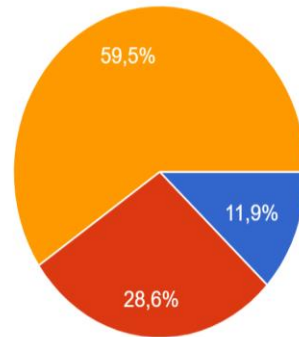
<b>Option</b>	<b>Frequency</b>	<b>%</b>
The function of it will be to clearly explain and explore their knowledge, focusing centrally on the student's learning and memorization.	5	11,9
It is the combination of face-to-face work and online work, where the student can control some factors such as the place, time and space of work.	12	28,6
They have been developed to improve the quality of the teaching-learning processes through the application of innovative pedagogical systems.	25	59,5

Resource: Students of fifth semester of PINE career

**Elaborate by:** Noroña, N., & Vayas, M., (2022).

**Graphic.1.** Knowledge about Technological Tools

42 respuestas



- The function of it will be to clearly explain and explore their knowledge, focusing centrally on the student's learning and memorization.
- It is the combination of face to face work and online work, where the student can control some factors such as the place, time and space of work.
- They have been developed to improve the quality of the teaching-learning processes through the application of i...

Resource: Students of fifth semester of PINE career

**Elaborate by:** Noroña, N., & Vayas, M., (2022).

### Analysis

The survey was conducted to 42 students of the PINE career about what they know about technological tools and was given three options where they have to choose the best option or description for “technological tools”. So, eighteen of them selected the third option that mentions that technology helps to improve their quality of life in teaching and learning processes, which is equivalent to 59,5%. On the other hand, twelve of them selected the second option where they think that technological tools are about the combination of face-to-face work and online learning where the students can control time and space of work, which is equivalent to 28,6%. Finally, five students choose the options that mention that technological tools help to be focusing on students' learning and memorization, which is equivalent to 11,9%.

### Discussion

Based on the data obtained through the graphics in the survey, it can be concluded that the third definition about the quality of the teaching and learning process through the application of innovative pedagogical systems has a better relevance over the other ones. However, some students thought that the technological tools are about the combination of face-to-face work and online learning where they can control some external factors. In addition, there are a few students who

think that these tools help to focus on learning and memorization. In conclusion, the researchers could observe that some students do not have a clear idea about technology and how it functions. As Surani (2020) mentions that usually students tend to master technological tools during virtual classes but the problem is that some of them also have difficulties in understanding academic material, so that online learning must be implemented in the academic curriculum to achieve learning objectives. Therefore, students need to have enough knowledge about these technological tools in order to take advantage of them for academic purposes.

**2. Do you think that it is important to know about technological tools? Why or why not?**

***Subcategory A.2: Learning support***

Based on the result some students consider that technological tools have been a support in their learning during these academic years. That's why learners stated that:

“Yes, I think that is important because technological tools support some aspects important in the learning processes” [Sí, creo que es importante porque las herramientas tecnológicas apoyan algunos aspectos importantes en los procesos de aprendizaje] (N.W).

In addition, many of the participants also agree that the tools have helped them in some main factors. They consider that:

“Yes, because it can help to improve your skills.” [Sí, porque puede ayudar a mejorar sus habilidades.] (M.E).

“Yes, it is important since it helps us in the teaching-learning process of the language and allows us to learn in a different way.” [Sí, es importante ya que nos ayuda en el proceso de enseñanza-aprendizaje del idioma y nos permite aprender de una manera diferente.] (T.J).

“I think it is important to know the technological tools because now, in times of pandemic, it has helped us, for this reason it is good to know the technological tools.” [Creo que es importante conocer las herramientas tecnológicas porque ahora en tiempos de pandemia nos ha ayudado, por eso es bueno conocer las herramientas tecnológicas] (Me.J).

These results showed that technological tools have been of great help and support for the learning process of the English language during online classes. According to Brown (2019) online

tools have offered students more flexible learning experiences. In other words, technology offers variety to learners that a typical classroom cannot. That's why it is important to have knowledge about how to take advantage of technology because it has helped students during the pandemic to try to improve English skills replacing face to face classes. For example, students can use different tools by which they can find a way in which they can obtain information according to their learning style, students can use technological tools to better understand while others can complete an activity with instant feedback to gauge their knowledge.

### 3. *How effective have online classes been for you?*

**Table. 4.** Online classes

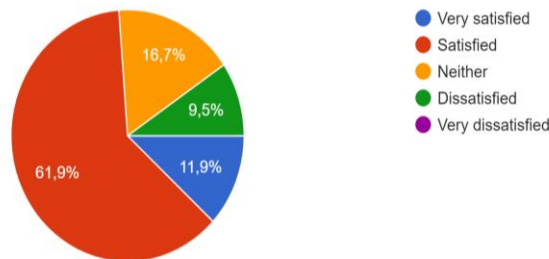
Option	Frequency	%
Very satisfied	5	11,9
Satisfied	26	61,9
Neither	7	16,7
Dissatisfied	4	9,5
Very dissatisfied	0	0

Resource: Students of fifth semester of PINE career

**Elaborate by:** Noroña, N., & Vayas, M., (2022).

**Graphic.2.** Online classes

42 respuestas



Resource: Students of fifth semester of PINE career

**Elaborate by:** Noroña, N., & Vayas, M., (2022).

## Analysis

The data was obtained to 42 students of the PINE career about how effective have been online classes for them where was applied the Likert scale with some options such as very satisfied, satisfied, neither, dissatisfied, very dissatisfied. Therefore, researchers can observe that the option “satisfied” has more relevance with an equivalent of 61,9%, which means that it was selected for 26 students. In addition, there were the options “Very satisfied” which has less percentage with 11,9% which means that just 5 students agree with the technology used in class. On the other hand, the option “neither” acquired more percentage than “very satisfied” with 16,7% which means that 7 of them selected it. Finally, we have the option “dissatisfied” which has 9,5%. It means 4 students who said that they are satisfied with the effectiveness of technology in online classes.

## Discussion

Researchers can conclude that the majority of students are “satisfied” with the effectiveness of technological tools within the online learning classes but just five of them chose “very satisfied” with the effectiveness of these tools but not the majority of students. It means that students do not really think that the use of technology is better or efficient enough for the correct development of English skills. On the other hand, there is a worrying percentage of students who selected “neither” as the best option to describe the usefulness of technological tools in education as well as the option “dissatisfied”. It means that technological tools are efficient enough for the majority of students to enhance their learning processes in English. Likewise, Ahmid (2018), mentioned that technological tools are a resource that can support students to solve some learning problems in ways that are effective and meaningful for them.

### **4. Have you had difficulties using technological tools?**

**Table. 5.** Difficulties using technological tools

<b>Option</b>	<b>Frequency</b>	<b>%</b>
Strongly agree	2	4,8
Agree	16	38,1
Undecided	13	31

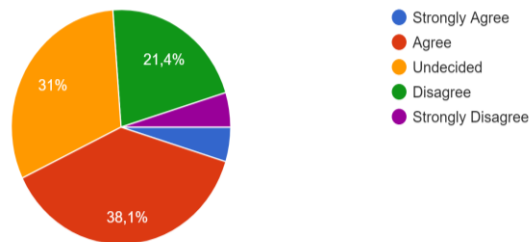
Disagree	9	21,4
Strongly disagree	2	4,8

Resource: Students of fifth semester of PINE career

Elaborate by: Noroña, N., & Vayas, M., (2022).

**Graphic.3.** Difficulties using technological tools

42 respuestas



Resource: Students of fifth semester of PINE career

Elaborate by: Noroña, N., & Vayas, M., (2022).

### Analysis

According to the survey developed for 42 students of PINE career about if they had difficulties using technological tools. Researchers could measure the data through the Likert scale with some options such as strongly agree, agree, undecided, disagree, strongly disagree. Therefore, the significance percentage in the graphic was of the “agree “option with 38,1% which means that 16 students selected it as the better option which means that students had partial difficulties applying these tools. In addition, the option “strongly agree” has 4,8% of selections which means that just 2 of them had significant difficulties at the moment of using technology during online learning. On the other hand, the percentage of “undecided” options was 31% which means that 13 students selected it. Moreover, the options “disagree” had 21,4% of respondents. It means 9 students, and “strongly disagree” with a percentage of 4,8 % which means 2.

### Discussion

The graphic shows that the option “agree” has more significance than “strongly agree” which means that students had a significant difficulty at the moment of using technological tools

during online learning. On the other hand, the option “undecided” also had a better recognition for students as well as “disagree” and “strongly disagree” which means that a portion of the respondents do not have weightiness problems or difficulties at the moment of applying technological tools for improving learning. In conclusion, there exists a meaningful percentage of students who had some difficulties at the moment of applying technological tools during online learning. Based on Arkorful and Abaidoo (2015) students do not have a good learning development and many students fail to obtain the necessary knowledge for their levels because learners have had to adapt to a new model of education.

**5. *Do you think that technological tools help you in your second language learning process?***

***Subcategory B.2: Technological Value***

According to the results, technological tools have played an important role in achieving good development and acquiring a second language in online classes. Students mention that:

“Yes, I do. Because technological tools provide us with a resource to acquire a second language.” [Sí. Porque las herramientas tecnológicas nos brindan un recurso para adquirir un segundo idioma.] (C.J).

“Yes, because both the tools and the teaching methodologies complement each other to improve teaching, which benefits both students and teachers.” [Sí, porque tanto las herramientas como las metodologías didácticas se complementan para mejorar la enseñanza, lo que beneficia tanto a alumnos como a docentes.] (T.M).

Technology is an integral part of our society and a major contributor to education. For a student of these decades, technology is part of their learning. Besides, it is easy to understand the assignments through live images and tutorials that the teacher shows in class (White, 2014). Another important aspect that students mentioned is the effectiveness in online class. One of the students affirms that:

“I agree because through different tools it is possible to practice and provide feedback on the information that our teachers impart to us in the classroom, thus reinforcing the

knowledge already acquired.” [Estoy de acuerdo porque a través de diferentes herramientas es posible practicar y retroalimentar la información que nos imparten nuestros docentes en el aula, reforzando así los conocimientos ya adquiridos.] (P.A).

In addition, other students stated that:

“It helps me a lot because if I don't understand a class I can search the web for video tutorials where they can explain the subject to me again” [Me ayuda mucho porque si no entiendo una clase puedo buscar en la web videotutoriales donde me puedan volver a explicar el tema] (S.N).

“Yes, because these allow you to develop the 4 skills that are listening, speaking, reading and writing” [Sí, porque estos te permiten desarrollar las 4 habilidades que son escuchar, hablar, leer y escribir.] (V.J).

According to the results, students consider that technological tools support a better understanding for learning and teaching processes during the online classes. Moreover, these tools help them to acquire a self-education and develop their English skills easily. That’s why students consider that technology helps the English language with positive results. Equally, Ahmid (2018), also argues that technology is used by teachers and students for both help and improve language skills as a tool to help and facilitate language learning.

**6. Which of these technological tools have been most useful for developing your English skills?**

**Table. 6.** The technological tool most useful for developing your English skills

Option	Frequency	%
Nearpod	27	64,3
Voki	10	23,8
Google classroom	30	71,4



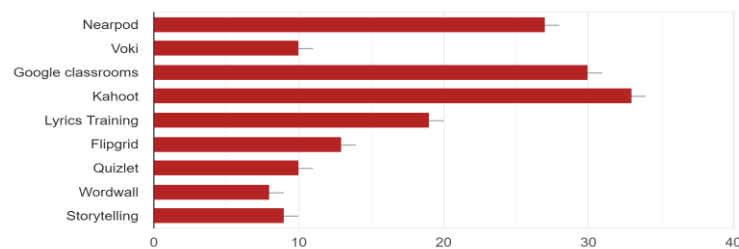
Kahoot	33	78,6
Lyrics training	19	45,2
Flipgrid	13	31
Quizlet	10	23,8
Wordwall	8	19
Storytelling	9	21,4

Resource: Students of fifth semester of PINE career

Elaborate by: Noroña, N., & Vayas, M., (2022).

**Graphic.4.** The technological tool most useful for developing your English skills

6. Which of these technological tools have been most useful for developing your English skills?  
42 respuestas



Resource: Students of fifth semester of PINE career

Elaborate by: Noroña, N., & Vayas, M., (2022).

**Analysis**

Based on the statistics developed through the survey made to 42 students of PINE career about what of the technological tools mentioned have been most useful for developing your English skills according to the interviewers' answers. The first app was Nearpod with 27 selections which means 64,3 %. The second app mentioned was Voki with 10 selections which is equivalent to 23,8%. The third choice was Google classrooms with 30 selections by students which is equivalent to 71,4 %. The fourth selection was Kahoot with 33 selections which means 78,6%. The fifth selection was Lyrics training with 19 students who selected it which is equivalent to 45,2 %. The sixth selection app was Quizlet with 10 which is equivalent to 23,8%. The seventh selection was

Wordwall with 8 selections which means 19%. Finally, a Storytelling app with 9 selections by students which is equivalent to 21,4%.

## Discussion

In brief, the results showed that the students thought that the Kahoot app is a better option to develop English skills during online classes. Then, the google classroom app also was chosen as one of the best applications to improve their learning as well as nearpod and lyrics training. On the other hand, the apps which had a low score or significance to develop English skills during online learning were quizlet, flipgrid, voki, storytelling and word wall. These apps are not considered an important part of English skills development based on statistics recovered from fifth students of PINE career. In addition, Korkmaz (2021), says that contrary to popular belief that games can only stimulate extrinsic motivation, students' responses to open-ended questions suggested that Kahoot definitely contributes to the development of internal motivation by changing students' attitudes towards foreign language learning in the long term.

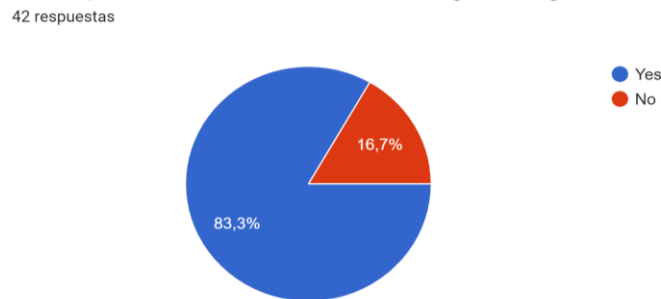
### ***7. Does your teacher use innovative technologies during class?***

**Table. 7.** Innovative technologies during class

<b>Option</b>	<b>Frequency</b>	<b>%</b>
Yes	35	83,3
No	7	16,7

Resource: Students of fifth semester of PINE career

**Elaborate by:** Noroña, N., & Vayas, M., (2022).

**Graphic.5.** Innovative technologies during class

Resource: Students of fifth semester of PINE career

**Elaborate by:** Noroña, N., & Vayas, M., (2022).

### Analysis

Based on the graphic through the survey made to 42 students of PINE career about if the teachers are using innovative technologies during classes researchers could observe that 83,3 % selected “yes” which means 35 students. On the other hand, 16,7% of them selected “no” which is equivalent to 7.

### Discussion

Through the data obtained from the survey, researchers could analyze that the majority of students agree and certify that their teachers are applying innovative technologies during the online classes to try to improve and develop their English skills correctly. On the other hand, researchers could also appreciate that a low portion of students selected “no” which means that their English teachers have a lack of training in the use of technology during the classes. In conclusion, a big percentage of students guarantee that the teachers are applying the technological tools to develop their online classes which also can be used as a support for developing English skills. Whereby, Ghavifekr and Wan (2015) indicated that the well teachers’ training and preparation in Technological tools facilitates the successful implementation of them in a second language and can improve teaching and learning processes.

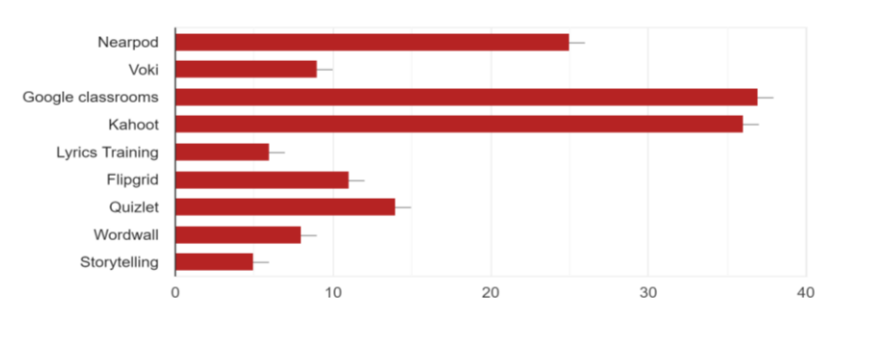
**8. Based on the previous question, which of the following technological tools has your teacher used in the classroom?**

**Table. 8.** Technological tools used by the teacher in the classroom

Option	Frequency	%
Nearpod	25	61
Voki	9	22
Google classroom	37	90,2
Kahoot	36	87,8
Lyrics training	6	14,6
Flipgrid	11	26,8
Quizlet	14	34,1
Wordwall	8	19,5
Storytelling	5	12,2

Resource: Students of fifth semester of PINE career

Elaborate by: Noroña, N., & Vayas, M., (2022).

**Graphic.6.** Technological tools used by the teacher in the classroom

Resource: Students of fifth semester of PINE career

Elaborate by: Noroña, N., & Vayas, M., (2022).

Analysis

Based on the statistics developed through the survey made to 42 students of PINE career about what of the technological tools mentioned have been most useful for developing your English skills according to the interviewers' answers. The first app was Nearpod with 25 selections which means 61 %. The second app mentioned was Voki with 9 selections which is equivalent to 22%. The third choice was Google classrooms with 37 selections by students which is equivalent to 90,2 %. The fourth selection was Kahoot with 36 selections which means 87,8%. The fifth selection was Lyrics training with 6 students who selected it which is equivalent to 14,6 %. The sixth selection app was Quizlet with 14 which is equivalent to 34,1%. The seventh selection was Wordwall with 8 selections which means 19,5%. Finally, a Storytelling app with 5 selections by students which is equivalent to 12,2%.

### Discussion

In brief, the results showed that the applications more used for the teachers are google classroom, kahoot and nearpod as a support to develop English skills during online classes. Partially, Flipgrid, quizlet and voki. Finally, the applications less used for teachers for these types of classes are Lyrics training, wordwall and storytelling. Ndibalema (2014) adds that nowadays the technological tools more used by teachers and students to develop their learning - teaching processes are Kahoot and Google meet because these apps are better to make contact with learners and where students can enhance language skills and create a personal workspace.

#### ***9. What skills have been developed in your English learning through the use of the technology tools selected above?***

**Table. 9.** Skill developed in English learning through the use of the technology tools

<b>Option</b>	<b>Frequency</b>	<b>%</b>
Grammar	28	66,7
Vocabulary	28	66,7
Reading	32	76,2
Listening	31	73,8

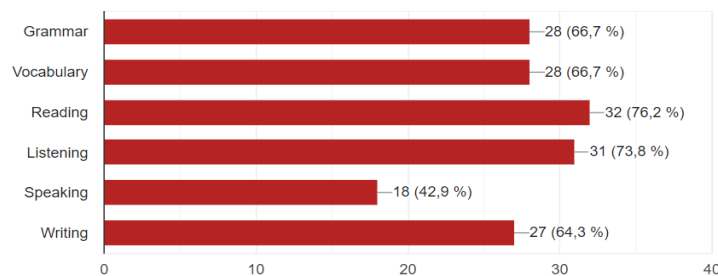
Speaking	18	42,9
Writing	27	64,3

Resource: Students of fifth semester of PINE career

Elaborate by: Noroña, N., & Vayas, M., (2022).

**Graphic. 7.** Skill developed in English learning through the use of the technology tools

42 respuestas



Resource: Students of fifth semester of PINE career

Elaborate by: Noroña, N., & Vayas, M., (2022).

### Analysis

Once the 42 students of the fifth semester of PINE career were asked which English skills they have developed the most with the use of technological tools, it was obtained that 28 of them have developed more Grammar, which is equivalent to 66.7%, on the other hand, the same amount of 28 students answered in Vocabulary, which corresponds to 66.7%. Likewise, 31 students claimed to have developed oral comprehension, which is equivalent to 73.8%. As for Speaking, 18 students marked Speaking as a developed skill, which is equivalent to 42.9%, and finally, 27 students developed Writing through the use of technological tools, which is equivalent to 64.3%.

### Discussion

Through the data obtained in the survey, researchers were able to observe that the skills which have been most developed through the use of technological tools are Reading and Listening. However, the difference with which they are considered the most developed is very small, indicating that the other skills were also developed during the learning process. Likewise, Arévalo

(2012) argues that online resources have proven to be a really important tool to attract and motivate the development of other competencies and the integration of competencies taking into account the type of material found as an online resource. On the contrary, the skill which students had the most difficulties in developing was Speaking, which shows that the online classes have affected the correct development of this skill.

**10. In conclusion, do you consider that technological tools such as nearpod, voki, google classrooms, flipgrid, quizlet, storytelling, etc and other tools are essential for working in a virtual classroom?**

**Table.10.** Technological tools are essential for working in a virtual classroom

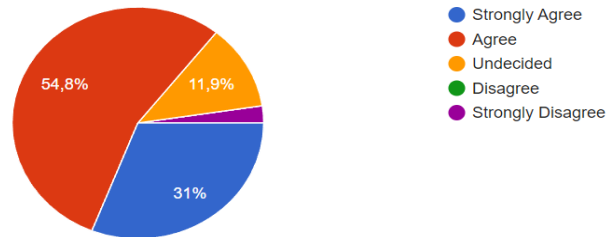
Option	Frequency	%
Strongly Agree	13	31%
Agree	23	54,8%
Undecided	5	11,9%
Disagree	0	0%
Strongly Disagree	1	2,4%
Total	42	100%

Resource: Students of fifth semester of PINE career

Elaborate by: Noroña, N., & Vayas, M., (2022).

**Graphic.8.** Technological tools are essential for working in a virtual classroom

42 respuestas



Resource: Students of fifth semester of PINE career

**Elaborate by:** Noroña, N., & Vayas, M., (2022).

### Analysis

The survey was applied to 42 students of the fifth semester of PINE career indicating whether they consider technological tools to be essential for virtual classes. According to the survey, 13 students strongly agreed, which is equivalent to 31%; on the other hand, 23 students responded that they only agreed, which is equivalent to 54.8%. In contrast, 5 students mentioned that they were undecided in their answer, which is equivalent to 11.9%. While only one student strongly disagreed, which is equivalent to 2%, for a total of 100%.

### Discussion

Through the data obtained in the survey, it is observed that most of the students consider that technological tools such as nearpod, voki, google classrooms, flipgrid, quizlet, and storytelling are essential for learning English as a second language during virtual classes. As explained by İlter (2015), good use of technology has a positive effect on students' learning and language awareness because it puts the real world in front of them and shows that technology is inevitable in today's world so students can be more motivated and active through technology by using apps where they can play language games and communicate with their teachers attracting their attention and interest in doing their task. The use of these technological tools have become an essential part of the classroom and many students prefer to use these tools to improve their skills because they can learn using topics that they know, becoming familiar with the vocabulary and making these tasks more



dynamic and get better results because being a topic of interest does not become a boring and monotonous task but it attracts their attention and motivates them to complete it correctly.

**11. What of the technological tools mentioned before would you prefer to use in your classes?**

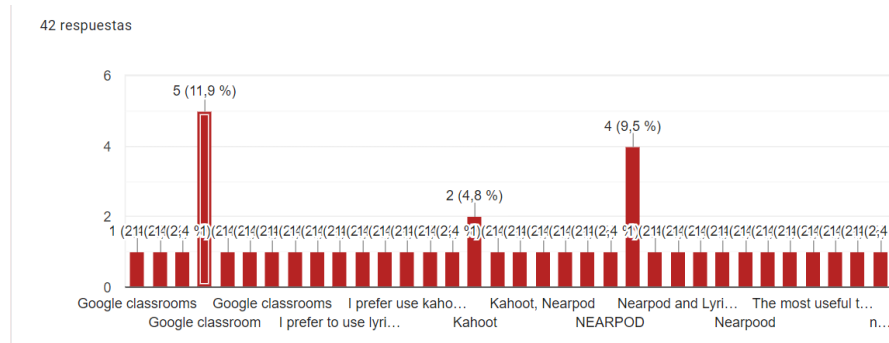
**Table. 11.** Technological tools preference

<b>Option</b>	<b>Frequency</b>
Nearpod	18
Voki	0
Google classroom	15
Kahoot	12
Lyrics training	6
Flipgrid	0
Quizlet	2
Wordwall	1
Storytelling	2

Resource: Students of fifth semester of PINE career

**Elaborate by:** Noroña, N., & Vayas, M., (2022).

**Graphic. 9.** Technological tools preference



Resource: Students of fifth semester of PINE career

**Elaborate by:** Noroña, N., & Vayas, M., (2022).

### Analysis

The survey was applied to 42 students of the fifth semester of the PINE career, indicating which are the technological tools they prefer to use in their classes. The results obtained from the survey were that 18 students prefer the use of Nearpod in their virtual classes. In addition, 15 students mentioned that the technological tool they prefer is Google Classroom. Furthermore, 12 students indicated that they prefer the use of Kahoot in their virtual classes. On the other hand, 6 students answered that Lyrics Training is the application of their preference. Therefore, 2 students answered that they preferred Quizlet. While only 1 student indicated that he preferred Wordwall. Finally 2 students mentioned that the technological tool they prefer is Storytelling.

### Discussion

According to the results obtained by the survey to the students, the researchers were able to observe that the most accepted technological tool and that the students prefer is Nearpod, where the majority of them indicated that it is the web site that is most used during their classes, indicating that It allows them to interact in real time with the teacher and includes information where students must increase their knowledge to be able to answer the questions properly. Shahrokni (2018) emphasizes that the Nearpod application is a tool to achieve the integration of new technologies in the teaching-learning process creating a more multimodal, engaging and accessible experience due to the variety of content and forms of formative assessment allowing to create a more authentic and engaging learning experience for students. Additionally, Google classroom has also been a

technological tool that students prefer to use for their learning during virtual classes. A student claims that the technological tool that she prefers is Google classroom because it allows her to interact more with teachers and allows her to better organize her tasks (G.B). These types of applications provide a better learning experience for both teachers and students because they interact using new and innovative resources that motivate students to learn and obtain higher results.

**12. Would you prefer to frequently use technological tools in your learning process?**

**Table.12.** Technological tools in learning process

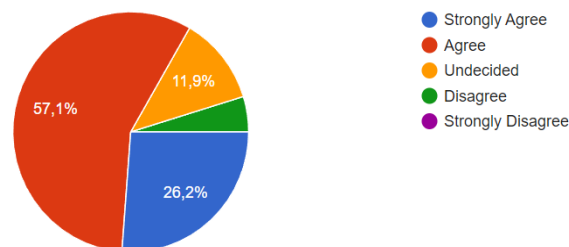
Option	Frequency	%
Strongly Agree	11	26,2%
Agree	24	57,1%
Undecided	5	11,9%
Disagree	2	4,8%
Strongly Disagree	0	0%
Total	42	100%

Resource: Students of fifth semester of PINE career

Elaborate by: Noroña, N., & Vayas, M., (2022).

**Graphic. 10.** Technological tools in learning process

42 respuestas



Resource: Students of fifth semester of PINE career

Elaborate by: Noroña, N., & Vayas, M., (2022).

## Analysis

The survey was applied to 42 students of the fifth semester of PINE career, indicating whether they prefer the frequent use of technological tools in their learning process. The results obtained from the survey were that 11 students strongly agreed, which is equivalent to 26.2%; on the other hand, 24 students responded that they only agreed, which is equivalent to 57.1%. Likewise, 5 students responded that they were undecided, equivalent to 11.9%. While only 2 students disagreed, equivalent to 4.8%, for a total of 100%.

## Discussion

Through the data obtained in the survey, the researchers concluded that most of the students who were selected for the sample have agreed and prefer the use of technological tools for their learning process during virtual classes, which has indicated that they have managed to adapt to their use during virtual classes. Similarly, Ahmadi (2018) argues that the use of technology has become a fundamental part of the learning process in and out of the classroom because all language classes often use some form of technology to enable teachers to adapt classroom activities, thus enhancing the learning process and technology continues to grow in importance as a tool to help teachers facilitate language learning for their students.

### ***13. Do you think technological tools have influenced students' development?***

**Table. 13.** Influence in students' development

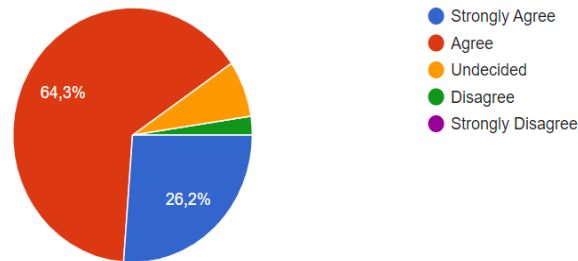
<b>Option</b>	<b>Frequency</b>	<b>%</b>
Strongly Agree	11	26,2%
Agree	27	64,3%
Undecided	3	7,1%
Disagree	1	2,4%
Strongly Disagree	0	0%
Total	42	100%

Resource: Students of fifth semester of PINE career

Elaborate by: Noroña, N., & Vayas, M., (2022).

**Graphic. 11.** Influence in students' development

42 respuestas



Resource: Students of fifth semester of PINE career

Elaborate by: Noroña, N., & Vayas, M., (2022).

## Analysis

The survey was applied to 42 students of the fifth semester of PINE career, indicating whether for the students the technological tools had influenced their development and learning process, where the results obtained were that 11 students strongly agreed on the influence of the tools on their learning, which is equivalent to 26.2%; on the other hand, 64.3% of the students responded that they only agreed, which means that 27 students selected the item. Likewise, 3 students responded that they were undecided with their answer, which is equivalent to 7.1% of the sample. While only 1 student disagreed, which is equivalent to 2.4%, giving an overall total of 100%.

## Discussion

According to the results obtained after having applied the survey to the students, the researchers could indicate that most of them selected the option where they indicate that they agree in the influence they had in their development as students through the use of technological tools, this indicated that the students during their virtual classes have had to learn and correctly handle the tools that their teacher uses during their teaching process, thus making these influence in their correct development of the skills that they seek to learn during the classes. Raja & Nagasubramani (2018) mention that technology, today, has influenced education because it has made our work

much easier and requires less time and in this way the impact of technology can be felt in every possible fields, the trust and dependence on technology that has been increasing lately has made the use of these tools in schools, universities and colleges inevitable. Consequently, for students, the use of technological equipment and tools increases student learning and interactivity, making the transmission of knowledge easy and comfortable, as well as effective, which means that our minds now tend to work faster when assisted with the use of modern technology.

**14. Are you satisfied with the technology you use for online learning?**

**Table.14.** Technology in English Learning

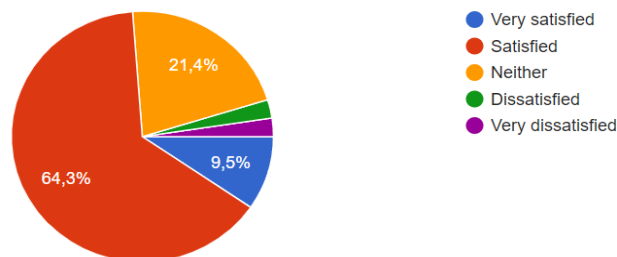
Option	Frequency	%
Very Satisfied	4	9,5%
Satisfied	27	64,3%
Neither	9	21,4%
Dissatisfied	1	2,4%
Very dissatisfied	1	2,4%
Total	42	100%

Resource: Students of fifth semester of PINE career

Elaborate by: Noroña, N., & Vayas, M., (2022).

**Graphic. 12.** Technology in English Learning

42 respuestas



Resource: Students of fifth semester of PINE career

Elaborate by: Noroña, N., & Vayas, M., (2022).

## Analysis

Through the survey that was applied to 42 students of the fifth semester of PINE career, where students were asked whether they were satisfied with the technology and its use in online learning, we found that 4 students equivalent to 9.5 of the sample were very satisfied with its use. Also, 64.3% of the students answered that they were only satisfied, which means that 27 students selected the item. On the other hand, 9 students marked neither in their answer, which is equivalent to 21.4% of the sample. In contrast, 1 student was dissatisfied, equivalent to 2.4%, and finally only one student indicated that he was very dissatisfied with technology and its use in online learning giving an overall total of 100%.

## Discussion

Based on the data obtained through the survey, the researchers were able to observe that the majority of the students who carried out the survey are satisfied with the technology and its use in online classes, which allows students to have a correct development of their English skills, in a different and more dynamic way during their virtual classes. According to Raja & Nagasubramani (2018), the visual explanation of the concepts provided by technological tools is interesting and encourages students to think instead of just reading words, making learning fun and enjoyable for students, allowing them to participate more in the classroom and even the teachers have the opportunity to make their classes more interactive and interesting by becoming quite efficient through technology. Considering the findings, it can be concluded that when students feel more motivated and active, they could obtain better results in their learning process.

### ***15. Would you like to receive training in technological tools?***

**Table. 15.** Training in technological tool

<b>Option</b>	<b>Frequency</b>	<b>%</b>
Strongly Agree	14	33,3%
Agree	23	54,8%
Undecided	3	7,1%

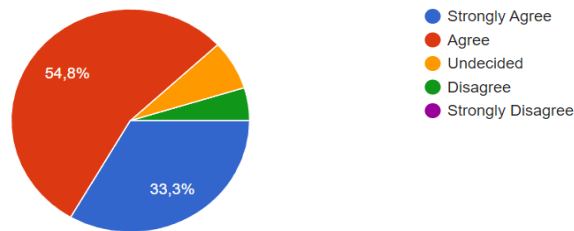
Disagree	2	4,8%
Strongly Disagree	0	0%
Total	42	100%

Resource: Students of fifth semester of PINE career

Elaborate by: Noroña, N., & Vayas, M., (2022).

### Graphic. 13. Training in technological tool

42 respuestas



Resource: Students of fifth semester of PINE career

Elaborate by: Noroña, N., & Vayas, M., (2022).

### Analysis

Through the survey that was applied to 42 students of the fifth semester of the PINE career, indicating whether they would like to receive training on the use of technological tools, where results were obtained that showed that 54.8% of the sample is in agreement in receiving training and instructions on the correct use of technological tools, thus showing that 23 students marked this answer. On the other hand, 33.3% of the students responded that they strongly agree, which means that 14 students selected the item. Likewise, 3 students responded that they were undecided with their answer, which is equivalent to 7.1% of the sample. While only 2 students disagreed, which is equivalent to 4.8%, giving an overall total of 100%.

### Discussion

According to the results obtained after having applied the survey to the fifth semester students of the PINE career, the researchers can indicate that the majority selected the option where



they indicate that they agree to receive training for the correct use of the tools. online. Thus, this indicated that students during their virtual classes have had to learn, adapt, and correctly handle the tools that their teacher uses during their teaching process, although as they are new study tools, many students do not have enough knowledge to take advantage of them. all the benefits that these tools present and thus use them correctly in their virtual classes. Johnson et al. (2016) argues that from the acquisition of new technological equipment to their adaptation and technological integration, it presents important challenges for both students and educators at each level of school systems due to this it is important that teachers do not receive effective professional development. about new technologies, they will not be able to use them to their full potential and in this way, they will not be able to indicate to their students the correct use of these tools in class. As a consequence of the lack of training for both teachers and students, it would not be possible to obtain all the benefits provided by technological tools for effective learning.

**16. Virtual education has allowed you to develop the 4 skills?**

**Table. 16.** Virtual education

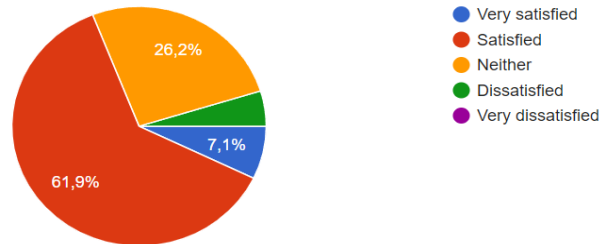
<b>Option</b>	<b>Frequency</b>	<b>%</b>
Very Satisfied	3	7,1%
Satisfied	26	61,9%
Neither	11	26,2%
Dissatisfied	2	4,8%
Very dissatisfied	0	0%
Total	42	100%

Resource: Students of fifth semester of PINE career

**Elaborate by:** Noroña, N., & Vayas, M., (2022).

**Graphic. 14.** Virtual education

42 respuestas



Resource: Students of fifth semester of PINE career

**Elaborate by:** Noroña, N., & Vayas, M., (2022).

### Analysis

Based on the data obtained through the survey that was applied to 42 students in the fifth semester of the PINE career, where the students were asked if virtual education allowed them to develop the 4 main English skills. The results obtained were that 3 students, equivalent to 7.1%, were very satisfied with virtual education. On the other hand, 61.9% of the sample were only satisfied with this learning modality, which is virtual classes. Likewise, 11 students marked neither as their option, which is equivalent to 26.2% of the sample. Finally, 2 students were dissatisfied, equivalent to 4.8%, giving an overall total of 100%.

### Discussion

According to the results obtained after having applied the survey to the students of the fifth semester of the PINE career, the researchers could indicate that the majority selected that they feel satisfied with virtual education and this has allowed them to develop the four main English skills correctly this through the use of technological tools that are used during virtual classes. In this way, the researchers were able to observe that the technological tools that have been used in online classes have been beneficial for students in their learning process, allowing an education where students explore their knowledge and can better develop their skills. Alahmadi and Alraddadi (2020) stated that the integration of technology has greatly expanded in education, including a variety of online learning approaches such as virtual classes, video conferencing and blended learning, which has had a positive impact on student experiences. and encourage student interaction with teachers, as well as promote interaction and collaboration in the classroom which has been shown to be effective and lead to better learning outcomes than traditional classes. This new

modality has been a challenge for students and teachers; however, favorable results have been obtained due to the correct adaptation and training of technological tools, allowing them to develop their English skills such as writing, listening, reading and speaking.

## **9. RESEARCH IMPACTS (TECHNICAL, SOCIAL, ENVIRONMENTAL, EDUCATION OR ECONOMIC):**

The research is focused on investigating the importance of training in the knowledge of the use of technological tools in learning English through the blended learning method during the virtual classes due to the pandemic. That is why some authors such as (Ghavifekr and Wan, 2015; Mbuva, 2015; Zhao, Gómez, and Llorente, 2019; Hussain, Iqbal, & Akhtar, 2010; Hernandez, García, Ochoa & Sang, 2017) corroborate that technological tools are effective in learning a second language as English and their skills. Therefore, the research will have an impact in the educational area since researchers have found the importance of training in the knowledge of the use of technological tools in the learning of English of the students of the Pedagogy of National and Foreign Language career of the Technical University of Cotopaxi through the blended learning method during virtual classes. This investigation can suggest to teachers as well as students the importance of training in technological tools through blended learning. Through the correct implementation of technological tools during virtual classes, students can enhance their English skills. Therefore, the students who are pursuing our career can have support to acquire a second language easily through some devices and apps and the teachers can use the suggested applications or tools for improving their teaching process. The researchers are receptive to acquiring more information of anyone with the purpose of reinforcing the data that exist in our investigation.

The investigation could be developed thanks to the collaboration of the students of the Technical University of Cotopaxi who are studying the English language.

## 10. CONCLUSIONS AND RECOMMENDATIONS

### 10.1 Conclusions:

- The researchers were able to categorize the technological tools that are used during virtual classes. The results obtained from the survey showed that Nearpod is the technological tool that is most used by students to develop their English skills but Google classroom and Kahoot were the technological tools that students prefer to use during their learning process due to their interactive development.
- Based on the data obtained from the questionnaire applied to the students, the researchers were able to determine that the use of these technological tools has been useful to develop and observe the progress of the students' English skills in an innovative way. It means that, according to the data, technological tools such as Nearpod, Google classroom, Kahoot have been innovative tools that have assisted the learning of English as a second language, because they help to catch the students' attention and motivate them to develop and enhance their English skills in a dynamic way.
- The researchers suggest the use of Kahoot, Nearpod and Google classroom as support tools through the Blended learning method during virtual classes of English as a second language, as it is an innovative and useful option for both teachers and students where they can interact dynamically. In addition to benefiting students to increase and improve the development of their English skills such as Speaking, Reading, Writing and Listening.

### 10.2 Recommendations:

- Researchers recommend the improvement in technology training to increase their knowledge on technological tools in order to provide students enough options and information to develop their English skills and use them as a tool to support learning during virtual classes.
- The use of technological tools such as Nearpod, Kahoot and Google is recommended since they are the tools that students prefer for their learning during virtual classes due to their ease of use and that they are intuitive tools for students.

- It is recommended that Universities provide teachers and students with courses of training about technological tools with the purpose of improving their teaching - learning skills.

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## 12. ANNEXES

### 12.1 Annex 1: Survey applied to the fifth levels A and B

18/2/22, 11:53

Technological tools survey

#### Technological tools survey

Survey to the beneficiaries of the "Fifth Semester Students of Technical University of Cotopaxi" project in the urban parishes of the Pujilí and Latacunga

Se ha registrado el correo del encuestado (null) al enviar este formulario.

**\*Obligatorio**

#### 1. Correo \*

To all participants, the main objective of this survey is to demonstrate the importance of the use of technological tools in the learning of English during virtual classes.

Dear students, please read each item carefully and select the correct answer according to your point of view.

#### 2. 1. What do you know about technological tools? Select the correct answer. \*

*Marca solo un óvalo.*

- The function of it will be to clearly explain and explore their knowledge, focusing centrally on the student's learning and memorization.
- It is the combination of face to face work and online work, where the student can control some factors such as the place, time and space of work.
- They have been developed to improve the quality of the teaching-learning processes through the application of innovative pedagogical systems.

#### 3. 2. Do you think that it is important to know about technological tools? Why or Why not? \*

4. 3. How effective have online classes been for you? \*

*Marca solo un óvalo.*

- Very satisfied  
 Satisfied  
 Neither  
 Dissatisfied  
 Very dissatisfied

5. 4. Have you had difficulties using technological tools? \*

*Marca solo un óvalo.*

- Strongly Agree  
 Agree  
 Undecided  
 Disagree  
 Strongly Disagree

6. 5. Do you think that technological tools help you in your second language learning process? Why or why not?

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7. 6. Which of these technological tools have been most useful for developing your English skills? \*

*Selecciona todos los que correspondan.*

- Nearpod
- Voki
- Google classrooms
- Kahoot
- Lyrics Training
- Flipgrid
- Quizlet
- Wordwall
- Storytelling

8. 7. Does your teacher use innovative technologies during class?

*Marca solo un óvalo.*

- Yes
- No

9. 8. Based on the previous question, which of the following technological tools has your teacher used in the classroom?

*Selecciona todos los que correspondan.*

- Nearpod
- Voki
- Google classrooms
- Kahoot
- Lyrics Training
- Flipgrid
- Quizlet
- Wordwall
- Storytelling

10. 9. What skills have you developed in your English learning through the use of the technological tools selected above?

*Selecciona todos los que correspondan.*

- Grammar
- Vocabulary
- Reading
- Listening
- Speaking
- Writing

11. 10. Do you consider that technological tools such as nearpod, voki, google classrooms, flipgrid, quizlet, storytelling, etc and other tools are essential for working in a virtual classroom?

*Marca solo un óvalo.*

- Strongly Agree
- Agree
- Undecided
- Disagree
- Strongly Disagree

12. 11. What of the technological tools mentioned before would you prefer to use in your classes?

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13. 12. Would you prefer to frequently use technological tools in your learning process?

*Marca solo un óvalo.*

- Strongly Agree  
 Agree  
 Undecided  
 Disagree  
 Strongly Disagree

14. 13. Do you think technological tools have influenced students' development?

*Marca solo un óvalo.*

- Strongly Agree  
 Agree  
 Undecided  
 Disagree  
 Strongly Disagree

15. 14. Are you satisfied with the technology you use for online learning?

*Marca solo un óvalo.*

- Very satisfied  
 Satisfied  
 Neither  
 Dissatisfied  
 Very dissatisfied

16. 15. Would you like to receive capacitations about technological tools?

*Marca solo un óvalo.*

- Strongly Agree
- Agree
- Undecided
- Disagree
- Strongly Disagree

17. 16. Virtual education has allowed you to develop the 4 skills?

*Marca solo un óvalo.*

- Very satisfied
- Satisfied
- Neither
- Dissatisfied
- Very dissatisfied

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