

OFICINA DE POSTGRADOS

Topic:

**CREATING LEARNER-CENTERED CLASSROOMS THROUGH THE
IMPLEMENTATION OF BLENDED-LEARNING APPLICATIONS**

**Research Project prior to obtain the Master's degree in Pedagogy of the
English Language as a Foreign Language**

Line of research:

Innovate pedagogies, teaching methods

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Ambato – Ecuador

November 2021

PONTIFICIA UNIVERSIDAD CATÓLICA DEL ECUADOR SEDE EN AMBATO
APPROVAL SHEET

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“CREATING LEARNER-CENTERED CLASSROOMS THROUGH THE IMPLEMENTATION OF BLENDED-LEARNING APPLICATIONS.”


Line of Investigation:

Innovative pedagogies, teaching methods

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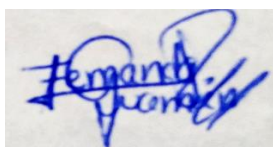
November - 2021

STATEMENT OF AUTHENTICITY AND RESPONSIBILITY

Yo: **Fernanda Raquel Guamán Rivera**, con **CC. 180462583-6**, autora del trabajo de graduación intitulado: "CREATING LEARNER-CENTERED CLASSROOMS THROUGH THE IMPLEMENTATION OF BLENDED-LEARNING APPLICATIONS." previa a la obtención del título profesional de **Magister en Pedagogía del Inglés como Lengua Extranjera**, en el programa de **Posgrado de Maestría en Pedagogía en Inglés como Lengua Extranjera**.

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ACKNOWLEDGEMENT

I would like to thank God for giving me the strength to succeed in this process as well as to the Pontifical Catholic University of Ambato which has provided me all the required knowledge to get the present degree.

In addition, I want to say thank you to my professors who shared all their knowledge and made this experience unique and unforgettable. I have learned a lot of teaching strategies that I am applying in my classes. Through this master's program, I met many professors that have turned into my inspiration to keep on working hard.

Finally, I want to thank my director who guided me with his professional experience to complete this research work. I think that without his help, I would not have been to achieve this degree.

DEDICATION

This research project is dedicated to my family. First, to my dear husband Juan Andres who supported me during all this process with all his love and understanding. Second, to my little daughter Renata who has shown me that we always have a reason to be happy. Finally, to my parents Isaura and Rodrigo who, whenever I need their help, were there for me.

In addition, I have to dedicate all my achievements to God. Whenever I need advice, I read the bible to clear my mind. I have found all my strength throughout the passages presented there.

Finally, I dedicate this research work to my friends who were working with me by providing their support and feedback in this process specially to Estefy G.

RESUMEN

El presente trabajo de investigación tiene como objetivo principal analizar la influencia de las aplicaciones de aprendizaje mixto en la creación de aulas centradas en el alumno que se realizó con los docentes del Centro de Idiomas CTT de los Andes en Ambato, Tungurahua. Este trabajo investigativo es cuantitativo porque se basa en datos recolectados. Además, tiene un alcance descriptivo, un diseño de investigación no experimental y transversal. Además, en esta investigación se consideró una población de 10 profesores y 117 alumnos que fueron evaluados a través de una encuesta como instrumento de evaluación. Los resultados obtenidos fueron analizados y evaluados con expertos en estadística. Con base en ello, se elaboró el taller "La implementación de aulas centradas en el alumno mediante el uso de aplicaciones de aprendizaje mixto". En el cual se encuestó a los beneficiarios para mostrar el impacto positivo que han obtenido con la presentación del taller. Las conclusiones que se han llegado es que aplicaciones como Nearpod, LearningApps y Quizziz promueven el aprendizaje independiente y cambiando a la vez el rol del docente al de un facilitador.

Palabras clave: aulas centradas en el alumno, aplicaciones de aprendizaje mixto, implementación, Nearpod, LearningApps, Quizziz.

ABSTRACT

The main objective of this research is to analyze the influence of blended learning applications in the creation of student-centered classrooms with teachers at the CTT de Los Andes Language Center in Ambato, Tungurahua. This research work is quantitative because it is based on collected data. In addition, it has a descriptive scope, a non-experimental and cross-sectional research design. In addition, this research considered a population of 10 teachers and 117 students who were evaluated through a survey as an evaluation instrument. The results obtained were analyzed and evaluated with statistical experts. Based on this, the workshop "The implementation of student-centered classrooms through blended learning applications" was developed. The beneficiaries were surveyed to show the positive impact they have obtained with the presentation of the workshop. The conclusions reached are that applications such as Nearpod, LearningApps, and Quizziz promote independent learning while changing the role of the teacher to that of a facilitator.

Keywords: learner-centered classrooms, blended learning applications, implementation, Nearpod, LearningApps, Quizzes.

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INTRODUCTION

This research work takes into consideration the theoretical and practical contribution of several authors to analyze in an exhaustive way the proposed topic. In the United States, blended-learning has been considered as a promising idea. It has been linked with the educational field which has shown a great and significant teaching method. In addition, the use of blended-learning into the EFL context has received much attention in the modes English is being learnt and taught. According to some studies, using blended-learning has brought many benefits not just to students but also to teachers. Mainly, it has improved the English learning environment in current classrooms since it has been proved that it helps to motivate students and teachers (Albidali & Alshareef, 2019).

Additionally, in Spain which is considered a modern educational model around the world, blended-learning is seen as a motivational tool in the learning process. According to Hernández and Pérez (2016), technology enhances the active learning in classrooms. Most of the activities done in class through the use of technology have created a balance between teachers' and students' responsibilities. Furthermore, students have shown a positive attitude towards blended-learning since its practicality of usage. In this research, flipped classrooms have been implemented to promote students' feeling of improvement, participation, critical thinking and active learning. This mix of technology and personal student-teacher interaction is the key for future education.

For instance, technology in Ecuador has promoted new educational scenarios where students are the center of the class. Virtual classrooms, blogs, online evaluations, mobile applications are currently used. On the other hand, the success of these tools are on teachers' hands because they are the ones in charge of creating personalized learning environments. Furthermore, mobile learning gives advantages such as content access flexibility, autonomous and group learning, and ludic strategies. Teachers should take advantage of blended-learning classrooms to improve their traditional classrooms. In the Technical University of the North of Ecuador, it has been proved that blended-learning promotes students' autonomous learning, critical thinking and collaborative work (Basantés, Naranjo, Gallegos, & Benitez, 2017).

Chacha (2017) states that the use of blended-learning in Tungurahua demonstrates that teachers usually use teacher-centered activities in their classrooms. That research study was carried out in Quisapincha High School. Although, most of their strategies are focused on teacher-centered activities, their learning objectives focused on the student individual learning process. As a result, technological tools like blogs and virtual classrooms are not commonly used. Quisapincha high school teachers consider that computer labs are not enough for students due to the large classes that the high school has. On the other hand, students consider that teachers are not well prepared to implement technological resources in their teaching methods.

This research has been centered on the common problems that traditional teaching has. Traditional teaching has not varied since long time ago. The teacher talking time is almost the one hundred percent of the class. The unique assessment method used is summative tests. Where students are supposed to remember what they learnt during class. However, educational world has changed but educational system keeps being the same. Teachers cannot continue teaching in the same way they were taught. Nowadays, children learn more by themselves through social websites rather than what they learn in the classroom. Teachers' role should be to prepare kids for the future and the future is technology (Gutiérrez, Herrera, de Jesús Bernabe, & Hernández, 2016).

Moreover, traditional methods are based on the behaviorism theory. It mentions the importance of a stimuli to get a response. A great number of contemporary teachers are still keeping this theory in mind. For instance, teachers model pronunciation for students to repeat it. This transmission of knowledge sets the teacher as a transmitter. However, students consider this to be the most boring way of learning (Godwa & Suma, 2017). Actually, it does not help the learning process. Motivation for learning is lower in classes where students are limited to imitate teachers' demonstrations. Traditional classes are considered as long lectures in a teacher-centered environment which is considered a problem for teachers who are looking for methods to help students in their learning process.

Based on the information found, it has been determined the following research question "How can blended-learning classrooms improve students' learning

process?” In order to formulate the present question it has been taken into account the students’ role which will help to implement blended-learning as a teaching tool to consider students’ learning as a priority. When students are the main focus of the class, teachers need to reformulate their teaching methods which must have as objective students’ learning independency.

This research work will be developed by the following hypothesis “Learner-centered classrooms facilitate the implementation of blended learning applications”. By the implementation of blended-learning applications in the classroom, teachers can change their traditional teaching. In this way, they become a facilitator who help students to develop their independency during the learning process. Students can work by themselves and collaboratively by participating in online applications or forums. Moreover, teachers and students will experiment a new way of learning by developing their critical thinking skills. Therefore, it is important for teachers to change their traditional teaching methods and go along with students’ learning necessities.

The general objective of this research work is to analyze the influence of blended-learning applications on the creation of learner-centered classrooms. Taking into consideration the most used blended-learning applications that are used nowadays by different educational institutions. There are a lot of blended-learning applications that are free. So, their usage is considered a great tool for educators who want to create their learner-centered environments in class. This study established four specific objectives to be developed during the research work.

1. To investigate through theoretical input blended-learning applications which influence the creation of learner-centered classrooms.
2. To determine the importance of blended-learning applications in the development of learner-centered classrooms.
3. To create a workshop presentation with the intention to present at TESOL and other similar ESL teaching conferences about the implementation of blended-learning applications to create learner-centered classrooms.
4. To evaluate the workshop presentation through the use of an instrumental research tool.

The selected methodology for this current research work has a quasi-quantitative focus since it is considered numerical data in order to collect information and the bibliographic resources to support the information. A survey will be applied to get statistic data through a field research where this study will be developed. The qualitative focus is also considered to comprehend the most relevant aspects of the obtained results. It will be carried out at *CTT de los Andes Language Center* where students are between the 18 and 30 years old. It is located in Tungurahua province.

In view of the justification, it can be noted that blended-learning applications are used nowadays to promote learner-centered classrooms. In particular, blended-learning has changed traditional teaching methods. Teachers face a new challenge in teaching. Education is changing every day and teachers should change too. Students' independent learning emerged and technology has opened for them a new world where sources of information are accessible to everyone. To implement a new learning method, it is necessary to think about a change. So that is the starting point for some new teaching influences which have lately emerged such as task-based learning, flipped classroom, autonomous learning, and technological implementations.

Definitely, teachers get benefit from blended-learning applications. For instance, monitoring a class becomes more efficient. Teacher-student communications gets faster and personalized. Along with transmission of knowledge, teachers go from having knowledge to transmitting it. Through the use of blended-learning applications, teachers generate knowledge not just in the classroom but also outside of it. This helps teachers to change their minds about traditional classes so it turns out more effective (Soya, 2018). Blended-learning reduces grading time and increase teachers' research time. In the same way, teachers become researchers of new and innovate blended-learning applications to facilitate their students' learning knowledge.

Indeed, students have easier access to teaching-learning materials. They master the use of technological gadgets to do homework every day. So, getting access to online materials is easy for most of them. Also, it facilitates communication with their teachers and with their classmates. Students can receive valuable feedback

from their teachers in less time than in a traditional class. Moreover, communication with their classmates is opened and they participate in forums and live activities. Additionally, students feel free to manage their time to work. Their independence work becomes more trustful. They become active participants of their learning process. The implementation of blended-learning totally changes the traditional classes to learner-centered classes prioritizing students' learning (Pérez, Rojas, Quinatoa, & Moya, 2017).

Furthermore, this research is original due to the fact that most of the researches done are based on blending learning but they have not studied the influence of it in the development of the student-centered learning. Previous studies such as the one made by Kritanto, Mustaji, & Mariono (2017) considered the way blended-learning has been used in the development of instructional materials such as lesson plans taking into account the methodology of e-learning. However, those studies do not mention which applications can be used to help in the creation of learner-centered classrooms. It is important to consider all those studies to take into account how those studies results can help to support the idea of blended-learning in learner-centered classrooms.

Besides, the impact of the present study is considered positive by some researchers. Such is the case of Akgunduz & Akinoglu (2017) , where they postulate that blended learning has increased academic success and motivation for learning. Equally important, Namyssova et al (2019) in their study highlighted that in order to implement a blended learning class, it is not necessary to have a lot of space. Classrooms are not essential. Institutions have more opportunities of enrolling a higher number of students. Students enjoy the feeling of becoming the center of the class by getting a personalized feedback from their teachers. In the same way, according to Barrera, Montaña, & Marín (2017), students are able to correct themselves thanks to the feedback given by their teachers.

CHAPTER I: STATE OF ART AND PRACTICE

In this chapter, there are different national and international investigations carried out related to the research problem which are blended-learning applications and their influence in the creation of learner-centered classrooms.

1.1. Learner-centered learning

International

Learner-centered learning takes place when the learner is the only responsible for learning while the teacher's responsibility is to facilitate the learning. According to Zabeli, Anderson, & Saqipi (2018) in their study *Towards the Development and Implementation of Learner-centered Education in Kosovo*, they mention that during the 20th century, learner-centered teaching and learning has increased its application in nowadays classrooms linked to constructivism philosophy. It incorporates student interests and needs. Indeed, the learner is not a passive receiver of knowledge. Although teachers change their roles to creators and facilitators to monitor the learning environment, their work during the learning process is essential for their students.

In addition, through their study Zabeli, Anderson, & Saqipi (2018) refer to the importance of usage of some materials besides the Internet. Textbooks are still considered as primary tools. They mention the use of these materials as tools to be implemented in the e-learning educational system. However, a reminder of the importance of the relationship teacher-student is mentioned as the most powerful element for this educational system. Student-centered learning can significantly be seen as more interactive than a teacher-student environment. This kind of relationship helps the student to have a sense of school belonging, which promotes students' participation cooperatively in classroom tasks. Teachers are the key element in order to internalize this approach.

On the other hand, Mara (2017) in the study *New perspective of learner-centered education in nowadays didactics*, explains the main objectives of a learner-centered education which are to base students' knowledge on personal characteristics as well as to keep a positive learning experience through the transmission of specific content. What the teacher teaches depends on how he

wants to help his students during their learning process. Moreover, this strategy looks for positive experiences that best interest the student. Some of the benefits found by the author's study in Romania are time, personal elections, collaborative learning, better teacher's monitoring, rapport, and different organizational forms of work. Timing becomes more flexible than in a traditional class.

According to Peche & Giraldo (2019) in their investigation *Flip Learning Learned in the student as a generator of educational quality*, they explain that learner-centered learning looks for promoting educational leadership from the student. This can be achieved if all the members of the educational community understand the importance of promoting new educational styles to improve education quality through the use of reflection, creation, and innovation in our students. The main identified problem in Peru is that not all the members of the educational system are active. As a consequence, teachers can work on new techniques to prepare their students for the current world. Schools role in content design keeps having the responsibility of adapting the learning model to the content.

On the other hand, Peche & Giraldo (2019) make emphasis on the shift that education has if traditional learning changes for the student-centered class. First, in traditional learning, the student is evaluated through exams which does not allow him to face a critical thinking situation. Second, in a traditional class, students are asked to work on tasks according to what the teacher explained in class. However, during a student-centered class students will use their previous knowledge to go in deep into specific topics and wake up their doubts to be clarified later on by their teacher. Finally, in a traditional class, the student arrives in class without previous knowledge but in a student-centered class, the student will be responsible for being prepared for the class.

In learner-centered learning, students are considered "transformative thinkers". Herranen, Verterinen, & Aksela (2018) state that learners who are exposed to the learner-centered approach should be seen as change agents of learning. Some researchers have considered the learner-centered approach also as flexible learning, experimental learning, and self-directed learning. One of the main principles that define learner-centered learning is that in this learning style, the learner is the most important individual at the moment of deciding on learning and

teaching activities. During this study carried out in Finland, teacher-centeredness is described as teaching in which teachers and students co-participate in a learning process.

National

According to Mendoza & Rodríguez (2019) in their study *Student-centered learning from research planning* stands that some educational institutions in Ecuador, student-centered approach takes a leading role that allows interaction between peers to build a learning community. However, educational policies and teaching methods should require an active leading school program where knowledge is transformed through critical and reflective students. Learner-centered learning promotes cooperative learning taking into account students' experiences, previous knowledge, and daily research. The students' role mainly focuses on asking the teacher for help every time they need it. Also, taking part in an organization where they can share their responsibilities with their peers.

Similarly, Burgos, Alvarado & Valdez (2019) in their article *Student-centered school approach* in Ecuador consider as students' role to read, prepare and ask for clarification in case some concepts are not clear at all. During their research, they found out that education should transform taking into account that students are the ones who generate knowledge. Our society must face a big challenge where education has to prepare students for future scenarios where they are the protagonist of the development of the world. Autonomy is the key to the student-centered approach. As a result, teachers' plan should go from the general to the specific things considering cooperation as a base of social organization and interaction of students.

In conclusion, we can say that learner-centered learning is presented as a challenge to change traditional teaching methods where the teacher is the center of the class. In learner-centered learning, the student' needs are the protagonist. Students' interaction takes a motivational role which emphasizes the importance of creativity and flexibility from the teachers' support. Also, student-centered learning looks for students' satisfaction in learning and promotes their investigative skills since the student is the one who discovers knowledge according to their goals. The teacher's role changes totally. The teachers become

a facilitator who is always there to support students during the learning process to clarify and guide their work.

1.2. Learner-centered teaching methods

International

In general, active methods are necessary to develop learner-centered classes. For instance, the collaborative approach allows students to work in pairs, brainstorm ideas, debate, have small group discussions, and work on projects. This mix of active methods helps the teacher to design a learner-centered class. The use of these activities should be carefully chosen by the teacher to motivate students and promote autonomous, active, and constructive learning. As well as teachers are well prepared to co-participate during their students' independent work, the results of a learner-centered collaborative task is great in a demanded society where students can share ideas in order to solve a problem (Silva-Quiroz, Fernandez, & Astudillo, 2016).

Initially, in the research paper *Learner-Centered Teaching: What makes it effective* carry out in Indonesia it is pointed out that the Indonesian government has implemented a learner-centered approach since 2013. In the newly designed curriculum teachers were obligated to apply some methods. First, they let students do the hard work of learning because they are not passive recipients of knowledge. Also, students have the autonomy and responsibility for material they learn and their knowledge in general. Besides, teachers should use highly engaging core content that meets the needs of the students. Furthermore, teachers have to give feedback to help students to improve. In addition, what most teachers struggle with is the lack of creativity (Darsih, 2018).

In the same way, El Hammoiuni, Bakkali, & El Youssfi (2020) in their investigation *Learner-Centered Teaching: A Case Study of its Implementation in Physics and Chemistry Classes in Moroccan High Schools* determine that one of the most relevant strategies to be considered in learner-centered is teaching the student study skills in order to foster his independence, responsibility, and lifelong learning. The method to be implemented should look for social interaction. In this way, cooperative learning emerges to encourage students' interactions,

negotiations, checking, and constructing meanings. As a result, tasks applied need to be authentic, stimulating, and varied. By teaching study skills, students will develop meta-cognition skills and critical thought.

Additionally, El Hammoiuni, Bakkali, & El Youssefi (2020) suggest that primary schools teachers should expose kids to develop knowledge through techniques like brainstorming and concept maps. They mention that students can discover knowledge by developing meaningful concepts. Concept maps are perfect visual strategies that give students a solid background to start from known to the unknown. I consider it relevant to be implemented these techniques to expand a little bit more teachers' opportunities to develop active learning in class. However, teachers in Ecuador as well as Moroccan teachers think that it is necessary to be well-informed and trained on active teaching techniques to help children in their learning process.

Subsequently, Marwan (2017) in his investigation *Implementing Learner-Centered Teaching in an English Foreign Language (EFL) Classroom*, which took place in Indonesia, mentions that learner-centered methodology deploys a variety of assessment items. For instance, instead of using a single grade as an evaluation tool students should be graded on their potential to promote learning. In the same way, individual activities need to be minimized. Teachers can facilitate active learning through the exchange of views with peers. It is also essential to work on brainstorming and mapping ideas. Some activities such as role-playing, problem-solving, pair work, and group work are enjoyable experiences to enable active learning.

According to Herranen, Vesterinen, & Aksela (2018) in their study *From Learner-Centered to Learner-Driven Sustainability Education in Finland* determine that even some traditional methods such as lecturing can be seen as meaningful in a learner-centered approach. Although lectures are boring, they have a purpose. For example, to offer new discussion perspectives. Visiting lectures are more natural rather than just giving them. However, in a learner-centered perspective learners should only work on tasks and study issues that are relevant for them. In this way, sustainability plays a crucial role since it helps the learner to realize

the relevance of the work they are interested in studying. Students go from something simple to think about the future issues that helps World's development.

Additionally, learner-centered teaching strategies has improved academic achievement. American secondary educators do not usually demonstrate how to use learner-centered strategies. However, one of the main strategies that teachers identify as crucial is the intervention method where students do the most reading, learning, and lectures at home. During class time, teachers promote collaborative activities where instant feedback is provided by an instructor. The main objective is that teachers can care less about the content they need to cover and care more about the principal content to develop deep learning. Students need to see evaluations as a way to improve learning so teachers should make evaluations less stressful by utilizing formative assessments, allowing students to take class notes during the test, and debriefing after the evaluation to consolidate their knowledge (Cain, 2020).

National

Reyes, Villafuerte, & Zambrano (2020) through their study *Inverted class for rural basic education* postulate that having a learner-centered class requires a special methodology which consists of keeping the teacher's role as a mediator and knowledgeable guide. In their research in Liguíqui parish in Manabí, Ecuador the flipped classroom techniques allows students to optimize their study time because they acquire the ability to construct significant knowledge and associate it with previous experiences. As well as students' academic performance has improved since most of the students changed their perspective about learning. Students feel confident about class participation while some teachers argue that they need more training on how to implement student-centered methodologies.

In the same fashion way, Argadoña, García, Ayón, & Zambrano (2020) points out the importance of innovation for nowadays education. In their study *Research and educational innovation: school challenge for COVID-19 in Ecuador* they consider essential to change into a new educational model where online resources promote intellectual autonomy in students. Considering the methods to be used as active rather than passive, promoting virtual focus in classes create a social paradigm. Some important strategies to be used can be solving problems

and e-learning. Because of today's reality, both teachers and students must take advantage of the COVID-19. As a result, the immersion of e-learning had opened new doors in teaching especially in learner-centered autonomy.

In conclusion, learner-centered teaching methods differ from author to author. But most of them consider that the best tool is motivation in class. Teachers are in charge of changing classroom rules by promoting independent work. Students spend more time working by themselves and optimize their time during class. In case students have doubts about their learning they can find support in their facilitators. As a result, technological tools are a great option to implement learner-centered since it helps students to have an active role and immediate feedback makes students feel confident and motivate to research in deep the content studied in class.

1.3. Blended-learning

National

Blended learning is considered an umbrella term. It is used to describe other blends such as combinations of different instructional methods, pedagogical approaches and technology. Blended includes face-to-face education learning and online learning. Moreover, blended learning is conceptualized in three different ways. First, the inclusive conceptualization emphasizes that blended education should include more or less all learning systems. Second, the quality conceptualization, looks for the positive effects that the complementation of face-to-face learning provides to online teaching. Finally, the quantity conceptualization which stands the importance of reducing the number of face-to-face meetings and optimize the use of online discussions (Hrastinski, 2019).

Sun & Qiu (2017) in their study *Developing a blended learning model in an EFL class* carry out in China claims that 96 students who studied intensive English at a Chinese university obtained better results in the English program by studying the course through blended learning strategies. Learners' opinions are obtained through questionnaires and focus group interviews where it was held that students' perceptions towards blended learning were positive. Students consider that their motivation to learn English has increased and according to their view

blended learning requires more time and effort from them. Students mention that with this approach it is easier to get access to their teacher. Also, it is seen as a harmonious relationship between the teacher and the student.

Sun & Qiu (2017) in their research mention that most participants agree that online learning is really useful in their language learning improvement. As they are learning English, all language skills are covered and well organized. Most of the participants mention that what they like the most is the instant feedback, online tutoring and collaborative learning activities which learners consider great help in their learning process. Participants also think that face-to-face sessions were really important for their language learning. They consider them as supplement for online learning and they said that they are more fruitful and interesting than traditional classroom. In the same way, participants content that online assessment was helpful and prompt feedback motivate them to become more autonomous, responsible and independent.

In the study *A development of the Blended Learning Model Using Edmodo for Maximizing Students' Oral Proficiency and Motivation* carry out in Thailand it has been exposed that using a blended learning model as a learning tool in a language learning process is more effective than traditional learning. Based on that, it is wanted to encourage teachers to see how technological tools can facilitate learning and help students produce better academic performance. Moreover, the study shows better oral proficiency since a technological learning tool has allowed students to actively engage in understanding, remembering, and applying new knowledge. As a result, blended learning is an effective approach to attain better learning outcomes as a solution for teachers who face time limits (Wichadee, 2017).

Similarly, Roldan (2018) demonstrate that the program "B-English" based on semi-distance classes has greatly influenced the dominance of the communicative skills in English students from I.E. Jose Carlos Mariategui high school in Peru. A B-English program is applied in a combined way with the Movers Cambridge exam. Students are assigned a level and worked through the Edmodo platform which opens the possibility to work outside the classroom according to students' own pace. Peruvian Ministry of Education uses the results

provided by the Cambridge evaluation in order to determine the evaluation parameters. In conclusion, blended learning has optimized the learning process because it is flexible, dynamic and interactive.

National

According to Cango & Bravo (2020) through their study *Teaching English in Ecuador's public educational institutions in the digital age* analyzes how teachers are implementing technological tools in teaching. They investigate some public institutions in Loja city to observe how teachers use technology. Unfortunately, the results determine that teachers do not use technology to teach. They are still using mainly the book, board, and posters. It is because that most public institutions do not have Internet access and computer laboratories that provide students opportunities to use blogs, interactive platforms, or any other kind of digital material. From my point of view, teachers should consider to implement some blended activities that motivate students to learn autonomously.

Torres, Romero, & Pérez (2018) in their study *Gamification and its possibilities in the blended learning environment: literature review* they conclude that blended learning opens a new model to the implementation of games. According to Torres et al, it is necessary to push the alignment between gamification and blended learning. They analyze 34 research contributions between 2012 and 2017 which has shown that the convergence between gamification and blended learning gives a positive effect that fosters motivation, feedback, and skills acquisition from students. Motivation is the key element that gamification looks for. As a consequence, the alignment between gamification and blended learning pushes mainly motivation which helps students in their learning process.

Limachi (2018) researched *The Blended Learning Model and its Impact on the Academic Record in English Students in Peru* so they conclude that students had improved their academic record by the use of the Edmodo social website. According to the author, it is recommended that students who are not familiar with the use of educational platforms or social websites take a training. During the research, most of the participants were at an A1 level and in the end, they achieved a B1 level. Edmodo is a platform that offers a variety of tools that can transform education not just for students but also for teachers and parents.

According to Medina & Gonzalez (2019) in their study *Methodology for the development of virtual courses to support learning combined in the unified baccalaureate of Ecuador* states that to implement blended learning as a functional and structural unit it should go through different development phases. As far as it is known, an educational transformation carries a curriculum modification in some cases elimination of some courses. The methodology suggested has as a goal the contribution in the implementation of a support course in blended learning. There are some particularities that need to be taken into account to design a blended course like new management, technological, pedagogical, structural, social, and esthetic ways.

Freire (2018) in his investigation *The B-learning as a methodological strategy to develop the writing skill in basic education students carry out in Ambato, Ecuador* mention that even though the fact that some private schools have availability of technology, not all English teachers in basic education take advantage of them. The author studies the influence of virtual learning in the process of developing writing and notices that teachers and students think that b-learning facilitates learning. Consequently, teachers must develop new educational sceneries through communication technologies which carries a lot of benefits such as facilitate the access of pedagogical resources including videos, presentations, and digital documents.

Besides, the use of digital media during the learning process motivates students. Pilco & Salazar (2020) say that teachers should use technology to create virtual learning and innovate education. The authors in their study *Multimedia technology and its relation with psychomotor development in pre-scholar kids from Luis A. Martinez School in Ambato* consider technology as a key in education which helps students to increase their knowledge and abilities. Blended learning is defined as a technological resource to promote an interactive source of knowledge where students develop their cognitive skills by feeling motivated.

In the same way, Llerena & Rodríguez (2017) in the study *Kahoot! A Digital Tool for Learning Vocabulary in a language classroom in Ambato* say that Kahoot has promoted the learning process of vocabulary into the classroom. This blended

platform improved students' commitment and peer interaction. Though the survey applied to students it has been identified that students find the use of the platform effortless and motivate to learn a new language. Kahoot has been also used for informal assessment. It is recommended for any subject and especially to practice vocabulary in a language class. University students are eager to use their mobile phones or tablets in class. In conclusion, eLearning tools provide a positive environment that creates friendly and cooperative classwork.

To sum up, blended learning is a combination of face-to-face sessions and online education. They offer a lot of benefits for learners, parents, and teachers such as the development of cognitive skills, facilitate interaction, offer innovative classes, improve learning languages especially English, and motivate students in the class. English learners who are applying these blended methods emphasize that this learning environment is well organized and all language skills are developed in a correct way. Some of the most used applications or platforms are Edmodo and Kahoot. Through their usage learners and parents have demonstrated that the main factor to their success is motivation.

1.4. Blended-learning in higher education

International

According to Yusoff, Yusoff, & Md Noh (2017) in their research *Blended Learning Approach for Less Proficient Students* they study the implementation of blended learning in higher education institutions by focusing on less proficient students in Malaysia. The main purpose is to show how blended learning can be designed to suit the less proficient students by identifying their learning styles and motivating them using technology applications. They develop a blended-learning module in three dimensions: face to face sessions, self-learning, and assessment. In this way, students started the first dimension by applying technology applications, so the educator can investigate students' learning styles. Finally assessment is developed in progress by tests, quizzes, and open book quizzes.

Furthermore, Bryan & Volchenkova (2016) in their study *Blended Learning: Definition, Models, Implications for higher education* carry out in Russia, analyze the concept of blended learning and its didactic possibilities to make an effective

transition from a traditional learning model to an integrated electronic environment in higher education. They conclude that blended learning is an integrated learning experience that can be controlled by an instructor whether during face-to-face sessions or virtual presence. Blended learning should be defined as future learning systems that look for pedagogical effectiveness promoting shy members participation. Higher education students tried lecture capture so they can have access to the class content at their own pace and time.

Hamila & Amin (2016) in their study *Implementation of Blended Learning in Higher Learning Institutions: A review of the literature* carry out in Malaysia postulate that instructors have faced a complete challenge to implement blended learning. Instructors need to manage their time on the computer as well as pedagogical and technical skills to conduct the program. In order to implement blended learning, it is necessary to emphasize the importance of staff training, support, and networking strategies. During their research, they notice that one of the biggest challenges is to change teachers' traditional teaching methods since they struggle on finding the right blend for their curriculum. They find it difficult to create harmony between the two environments: face-to-face and online.

Dziuban, Graham, Moskal, Norberg, & Sicilia (2018) in their investigation *Blended learning: the new normal and emerging technologies* carry out in The United States point out that blended learning is always bound to future education. Dziuban et al study some of the aspects to be taken into consideration to implement blended learning in higher education. They find out that promoting blended learning increases students' access to it and students' success rates are better too. To decide where students want to study, they consider it important to know about the modalities that the university offers. Nowadays, students feel comfortable by studying in an environment that increases pressure to become more responsive to contemporary students' lifestyles.

National

According to Cedeño (2019) in her study *Technological collaborative tools as means of learning in higher education in Ecuador*, she states that technology has brought a lot of tools which are considered beneficial for teachers and students. Today's generation is used to work with mobile gadgets, computers, and all kinds

of resources that the Internet offers. Undoubtedly, a modern teacher must be prepared to implement technology in their classes. However, Ecuador has suffered an economical affection since 2019 by around 145 million dollars for higher education budget affection which reflects a decrease in technological advances for universities. So, teachers must be prepared to look for free websites that offer a lot of benefits for university students having in this way a permanent connection between teachers and students.

In addition, Cedeño (2019) find out that each technological tool is focused on specific purposes especially in education. There is a list of tools used that are free. First, *Moodle* and *Chamilo* are websites used specifically to work on virtual learning. In the case of teachers, *Google Drive*, *Dropbox*, and *One Drive* are used to store information in the cloud. In the same way, to be in contact between students and teachers *Facebook*, *Twitter* and *Whatsaap* are the most popular. Also, to create content teachers can use videos, podcasts, websites, and blogs. To improve students' academic work some websites can be used like *Canva*, *Kahoot*, *Socrative* and *Quizziz*. I think that all those tools are useful and teachers just need to use them in class to improve, innovate, and motivate students.

Chamorro, Bejarano, & Colcha (2021) in their paper *SOCRATIVE, interactive application to evaluate the learning results of English as a Foreign Language students* highlight the benefits of using Socrative as a learning tool. They mentioned that this application is easily used as a questions bank which includes trivial answers. One of the main benefits is that it can be used through any navigator connected to the Internet. Also, Socrative allows students to think critically and to analyze ideas by developing mental skills. It is a free tool that has two versions, one for students and another for teachers. Through this research study the authors conclude that students by using this application get the evaluation system easily to develop and promote student-teacher interaction.

Guerrero & Beltrán (2020) in their research "*Social networking and technology in university learning: a case of Salesian Polytechnic University Cuenca- Ecuador*" points out that applications like Facebook, WhatsApp, and Twitter promote a big influence in the educational field. Those applications allow a better communicative teacher-student relationship. Students in Cuenca spend almost

four hours a day on social networking sites. Teachers can take a huge advantage of students' social networking usage since it can help the teacher to create online learning environments like learning contests, debates, forums, and research. Furthermore, university professors can include the use of social networking sites during class in order to create chats or posts that promote communication.

According to Yugcha & Ordoñez (2020) in their study "*Kahoot in Biology learning process with first bach students from the Bicentenario high school*" state that Kahoot influenced in a positive way increasing students' motivation showing a significant improvement in academic performance. Kahoot is considered an innovative app that helps learners in academic performance through Silent Period. It is the time when a student is so new to a language that he cannot attempt to speak it. In this way, students need to internalize content. Besides, Kahoot offers teachers a wide range of teaching techniques such as jumble, anticipation guide, structured conversations, and final word. For example, jumble challenges students to put phrases or words in a particular order.

Sosa & León (2020) in their study "*Moodle platform and its influence in virtual learning*" mention that 42.9% of students have a regular level in the use of the platform and the 42.1% have a good level of use. However, the 31, 6% of students have excellent use of Moodle, it is considered that virtual learning needs to improve. Most universities have been using Moodle for promoting virtual learning. Skills like reading, listening and language use can be developed by the combination of some learning apps into Moodle. As a result, students and professors who get used to Moodle usage can success in their virtual learning by improving the tools that are promoting in this app.

Lagos, Benavides, Troya, & Jácome (2018) in their investigation *Blended learning, an innovative alternative in Ecuador's Higher Education* postulate that 98% of the students in the research felt satisfied by using blended learning, and most of them consider it as a tool that allows students to reinforce face-to-face classes. Participants think that by using that model they save time in transport. Also, teachers conclude that blended learning contributes to assimilate in a better way the content presented in class. Time and space are also optimized. Blended

learning according to this investigation is becoming an innovative alternative for higher education.

According to Aycart (2019) in her study *Flipped Learning as an approach for university educational quality in Ecuador* suggests that people must be aware that technology has actively entered the world and is helping to build the knowledge. Certainly, technology plays an important role in higher education since a university is considered a place where knowledge is built and shared. One of the most common ways of implementing flipped classrooms in higher education is through the use of blended learning. Classroom time is used to go in deep into certain topics that students had found difficult during their work research. As students are from a higher level it is expected that students are able to reason, synthesize, make a deduction at a complex level.

University students have been using online resources for around five years ago. These online resources have had an important positive impact on some higher educational institutions in Ecuador such as in Babahoyo city. As we are part of a digital era, teachers need to change their traditional methods into new tools like video classes, cellphone apps, Power Point presentations, web tutorials, and platforms. Students have been exposed to interactive activities in the classroom as well as outside it by using a computer. Through the use of interactive tools, students have demonstrated a higher level of interest and meaningful learning by having the support of their teachers in the research process (Cabezas, Paredes, Quispe, & Camacho, 2020).

Lagos, Cevallos, Espinosa, & Nivelá (2020) in their research *Blended Learning and its application in university teaching in Ecuador* they content that there is an 88,4% satisfaction in using blended learning in academic activities. Blended learning is mainly considered a great tool that reinforces face-to-face classes. As a result, most of the participants agreed that blended learning is highly accepted in higher education because it saves transportation time, improves classroom communication, and it should be implemented into the career curriculum. In the same way, a big effort and learning process from teachers is required since technology is changing every day and needs to be adjusted into the modern learning model.

On the other hand, Gavilanes & Chango (2019) in their study *Blended learning methodology: The use of social media in the classroom* carry out in Ambato city, conclude that social media is used informally in the classroom rather than as a pedagogical resource. Most of the students who were part of the investigation stand that teachers need to use more interactive activities in the classroom. Consequently, the authors conclude that university students can improve their academic development through the use of applications like Kahoot and Facebook which promotes blended learning. Students consider that teachers need to use social media resources more often in the class because most of them are used to those applications.

As a result, blended-learning for higher education is seen as a challenge for educators and students. Technology is used in class informally. Students are used to working with their cellphones, tablets, and computers but not for educational purposes. For teachers, the change from a traditional class to an integrated electronic environment is difficult. Teachers need to see this blended education as an opportunity for less proficient students since it is innovative and according to the studies presented it increases success rates for higher education students. Nowadays, there some websites, applications, and free platforms, and teachers are including in their classes to create a friendly learning environment where motivation is the key element.

CHAPTER II: METHODOLOGICAL DESIGN

2.1. Research and research approach

The research on Creating Learner-centered Classrooms through The Implementation of Blended-learning applications carry out in CTT de los Andes Language Center located in Tungurahua province is quantitative with a descriptive scope, non-experimental, and cross-sectional research design.

The present research is quantitative, according to Hernández, Fernández & Baptista (2010) "It uses data collection to test hypotheses, based on the numerical measurement and statistical analysis, to establish behavioral patterns and test theories" (p.4). Thus, this type of research is essential in the present project, since it allows relying on the information collected through psychometric instruments that denote reliability and at the same time is determined through the process of numerical measurement and statistical analysis, in order to obtain true results.

Based on Hernández et al. (2010) point out that the descriptive scope "aims to measure and collect information, where it seeks to specify the properties or characteristics of profiles of persons or groups, individually or as a whole on the concepts or variables referred to in the research" (p. 80). Thus, in the present research, the procedure is applicable since it allows the inquiry of the variable where it is intended to measure the different tendencies to be described in the population.

The objective of this research is to analyze the influence of blended-learning applications on the creation of learner-centered classrooms, for which a transversal non-experimental research design was used, where variables are not manipulated. Hernández et al. (2010) indicate that the experimental design is the situations or phenomena as they occur in the context in naturally without being forged or controlled, at the same time it is related to the transversal cut by collecting information in a short time.

Evaluation instrument

In the present research project, a survey is used as a technique and a questionnaire as a tool. These two resources will be both significant for data collection. The evaluation instrument consists of a number of five questions each. There are two questionnaires one directed for teachers and one for students.

2.2. Population and sample

The research is carried out in a private institution in the province of Tungurahua, working with a total population of 30 students; according to López (2004) "the population is used to describe the subjects of a particular study: all or all those who are the object of a statistical observation" (p. 70). In addition, since it is a universe, it was not necessary to obtain a sample. It is also necessary to mention that the students participating in the research are part of the same classroom.

It should be noted that the items are applied to all students stipulated in the population under study; therefore, no one was excluded from the administration of the research instrument. In brief, the population of this research project will be composed of both intermediate students of the CTT Language Center and English teachers working there full time according to the following table:

Table 1. Population

Population	Quantity
Teachers	10
Students	117
Total	127

Made by: Fernanda Guaman

In order to get more reliable results, the data collection is gotten from the entire population. Therefore, it is not necessary to calculate the sample.

Methodological procedure

The research process on Creating Learner-centered Classrooms through The Implementation of Blended-learning applications carried out in CTT de los Andes Language Center located in Tungurahua province begin with the review of literature and bibliography on the variable under study; the contribution and argument of the authors makes it possible to obtain a broader vision of the topic to be investigated.

Subsequently, an official letter is sent to the academic director of the Private Educational Institution for the application of the evaluation instrument to the students; the use of the evaluation instrument survey, which has its respective reliability and validity, was considered pertinent.

2.3. Data collection

The application of the evaluation instrument is continued through the specific population of teachers, in this way allows me to analyze in a general way the possible results of the research. The data collection was carried out in a single day, April 15 of the current year, through the application of the evaluation instrument to students of the CTT de Los Andes Language Center in Tungurahua province through an online survey due to online classes.

Thus, once the teacher evaluation data is obtained, they are shown in Google surveys. The analysis of the data was verified for the general population, based on the results shown in the form of graphics.

Based on the results, the prevention plan is determined in order to help mitigate the exposed risks, and the results are validated with specialists in the area under study. Finally, the conclusions and recommendations are drawn up, thus fulfilling the objectives proposed at the beginning of the research.

Processing and analysis of information

This section includes a detailed interpretation of the statistical information gathered from the survey applied to teachers and students of the CTT de los Andes Language Center regarding the use of blended applications for improving learner-centered classrooms. The gotten results help for hypothesis verification and the conclusions of the study. For that purpose, Google forms survey are used to enable the performance of frequency analysis and the hypothesis verification through the software IBM SPSS.

Firstly, the reliability of the quantitative instrument is determined; for this purpose, the SPSS statistic is used, which results are established by the range stipulated by Cronbach's Alpha coefficient. Table 2 shows the total coefficient of the instrument,

which was .730, considered acceptable and adequate for the development of the research; in addition, the number of items corresponds to the survey questions.

Table 2. Cronbach's Alpha coefficient results

Reliability statistics		
Cronbach's Alpha	Cronbach's alpha based on standardized items	Number of elements
,730	,731	6

Source: SPSS Statistics

The summary of the processing (Table 3) shows the 127 valid cases, no respondent was excluded, thus the instrument is totally reliable for the measurement and correlation of the variables.

Table 3. Case processing summary

Case processing summary			
		N	%
Cases	Valid	127	100,0
	Excluding ^a	0	,0
	Total	127	100,0

a. Elimination by list is based on all variables in the procedure.

Source: SPSS Statistics

Hypothesis statement

H1: Learner-centered classrooms facilitate the implementation of blended learning applications.

H0: Learner-centered classrooms do not facilitate the implementation of blended learning applications.

Table 4. Pearson correlation coefficient

Correlations	
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		Learned centered classrooms	Blended learning applications
Learned centered classrooms	Pearson correlation	1	,980**
	Sig. (bilateral)		,000
	N	38	38
Blended learning applications	Pearson correlation	,980**	1
	Sig. (bilateral)	,000	
	N	3	3

Source: SPSS Statistics

As can be seen in Table 4, it can be seen that there is a perfect positive correlation, in other words, that Learned-centered classrooms and Blended learning applications are directly correlated. This is because the correlation is equal to 1, therefore, the alternative hypothesis H1. is accepted, which indicates: Learner-centered classrooms facilitate the implementation of blended learning applications.

There are 10 teachers surveyed from the CTT de los Andes Language Center, who are full-time teachers of the institution, the following figures show their answers:

Item 1: Do you use web applications to improve your students' interests, abilities, and learning styles?

Table 5. Use of web applications.

Frequency	Teachers	Percentage
Always	8	80%
Usually	0	0%
Sometimes	2	20%
Hardly ever	0	0%
Never	0	0%

Author: Guaman, F. (2021)

Source: Teachers' survey directed to full time teachers at CTT de los Andes Language Center.

Analysis and Interpretation

The results of the survey applied show that 8 teachers that represent 80% always use web applications to improve their students' interests, abilities, and learning styles, 2 teachers that represent 20% said that they sometimes do it. Based on the data collected, it is possible to conclude that the majority of teachers use web applications in class. Nowadays, because of the COVID-19 pandemic most of the teachers have been obligated to implement technological tools in their class, maybe not in an appropriate way since some of them were not used to it. However, due to

the present conditions teachers are working hard to implement web applications in their lessons.

Item 2: Do you consider that your students enjoy using applications in their learning process?

Table 6. Students' joy of using applications

Frequency	Teachers	Percentage
Always	6	60%
Usually	2	20%
Sometimes	0	0%
Hardly ever	2	20%
Never	0	0%

Author: Guaman, F. (2021)

Source: Teachers' survey directed to full time teachers at CTT de los Andes Language Center.

Analysis and Interpretation

According to the data obtain and represent in table 3, 6 teachers that represent 60% think that their students always enjoy using applications in their learning process, 2 teachers consider that usually, their students enjoy it, and 2 others expressed that hardly ever their students had enjoyed using applications to learn.

The data gotten shows that students like using applications in their learning process. As a consequence, teachers need to innovate their classes by using tools that are of students' interest.

Item 3: Do you consider that learning applications help your students to become more independent learners?

Table 7. Independency of students with learning applications.

Frequency	Teachers	Percentage
Strongly agree	0	0%
Agree	5	50%
Undecided	2	20%
Disagree	0	0%
Strongly disagree	3	30%

Author: Guaman, F. (2021)

Source: Teachers' survey directed to full time teachers at CTT de los Andes Language Center.

Analysis and Interpretation

According to the data of table 4 and Figure 3, 5 teachers who represent the 50% agreed that learning applications help their students to become more independent learners, 3 teachers that represent 30% strongly agree on that, and 2 teachers that represent 20% keep undecided about that idea.

As seen, teachers at CTT de los Andes Language Center are conscious of the independence that learning applications provide to students. As teachers, we know the great learning chance that technology is giving us. However, some teachers are really used to traditional methods and struggle a lot by implementing new applications in their lessons.

Item 4: Do you consider that learning web applications help your students to learn at their own speed?

Table 8. Students' learning speed.

Frequency	Teachers	Percentage
Strongly agree	1	10%
Agree	7	70%
Undecided	0	0%
Disagree	2	20%
Strongly disagree	0	0%

Author: Guaman, F. (2021)

Source: Teachers' survey directed to full time teachers at CTT de los Andes Language Center.

Analysis and Interpretation

The data obtained shows that 7 teachers that represent 70% agreed that learning web applications help their students to learn at their speed, 2 teachers that represent 20% disagree on it, and 1 teacher that represent 10% strongly agree with that idea. It's evidenced that the majority of teachers consider that learning web applications provide students the chance of learning at their own pace. In that way, students do not feel pressure at learning. Students feel confident because they have the necessary time to research topics that they need to investigate to construct their own knowledge.

Item 5: Do you use blended applications where you can monitor your students and provide individual feedback?

Table 9. Monitor and individual feedback.

Frequency	Teachers	Percentage
Always	3	30%
Usually	4	40%
Sometimes	3	30%
Hardly ever	0	0%
Never	0	0%

Author: Guaman, F. (2021)

Source: Teachers' survey directed to full time teachers at CTT de los Andes Language Center.

Analysis and Interpretation

The table and figure show that 4 teachers that represent 40% said that they usually use blended applications where they can monitor their students and provide individual feedback, 3 teachers that represent 30% sometimes use them, and 3 others always use blended applications that monitor and give individual feedback to students.

According to these results, most of the surveyed teachers use blended applications that help them to monitor students while they are working on their assignments. Blended applications in most of cases, provide individual feedback so students are able to notice their mistakes immediately. Teachers can monitor students' work by giving them valuable feedback to construct their knowledge.

Item 6: Which of the following blended applications are you most familiar with? (More than one answer was allowed)

Table 10. Blended-applications.

Frequency	Teachers	Percentage
Kahoot	5	26,3%
Quizizz	7	36,8%
Flipgrid	2	10,5%
Social media pages (Facebook, Youtube, Whatsaap)	4	21,1%
Nearpod	1	5,3%

Author: Guaman, F. (2021)

Source: Teachers' survey directed to full time teachers at CTT de los Andes Language Center.

Analysis and Interpretation

According to table 7 and figure 6, the application that teachers are most familiar with is Quizziz where 7 teachers that represent 36,8 % chose as the one they are most familiar with. In the second place, 5 teachers that represent 26,3% identified Kahoot as the second most popular. Almost in the same way, 4 teachers that represent 21,1% mentioned that they are familiar with social media page usage. In addition, 2 teachers that represent 10, 5% identified Flipgrid as an application they had used. Finally, one teacher that represents 5,3% mentioned Nearpod as the application he is most familiar with.

Students' survey results and analysis

There were 117 CTT Language Center students surveyed.

Item 1: Does your teacher use web applications to improve your students' interest, abilities, and learning styles?

Table 11. Use of web applications.

Frequency	Students	Percentage
Always	86	73,5%
Usually	25	21,4%
Sometimes	4	3,4%
Almost never	1	0,9%
Never	1	0,9%

Author: Guaman, F. (2021)

Source: Students' survey directed to intermediate students at CTT de los Andes Language Center.

Analysis and Interpretation

The analysis is done in this question states that 86 students who represent 73,5% said that they teachers always use web applications to improve their interests, abilities, and learning styles, while 25 students that represent 21,4% said that their teachers usually use them, 4 students that represent 3,4 % said that their teachers sometimes use them, 1 student said that represent 0,9 % said that his teacher almost never use them, and 1 said that his teacher never uses them.

Based on the data collected, it is possible to conclude that the majority of teachers use web applications in class. It is seen as a big advantage to develop a project

based on student's interest, abilities, and learning styles because students are using to use web applications in class.

Item 2: Do you enjoy using applications in your learning process?

Table 12. Students' joy of using applications

Frequency	Students	Percentage
Always	84	72,4%
Usually	24	20,7%
Sometimes	7	6%
Almost never	0	0%
Never	1	0,9%

Author: Guaman, F. (2021)

Source: Students' survey directed to intermediate students at CTT de los Andes Language Center.

Analysis and Interpretation

The analysis done in this question states that 84 students who represent 72,4 % always enjoy using applications in their learning process, 24 students who represent 20,7% usually enjoy it, 7 students that represent 6% sometimes enjoy it, and 1 student never enjoys using applications to learn.

Having these results, it is clear to say that the students' majority always enjoy using applications in their learning process. This happened because since they were born they are used to technology. Currently, students are part of a technological era where any device is as easy to use as putting on clothes.

Item 3: Do learning applications help you to become a more independent learner?

Table 13. Independency of students with learning applications.

Frequency	Students	Percentage
Strongly agree	56	48,3%
Agree	49	42,2%
Undecided	10	8,6%
Disagree	1	0,9%
Strongly disagree	0	0%

Author: Guaman, F. (2021)

Source: Students' survey directed to intermediate students at CTT de los Andes Language Center.

Analysis and Interpretation

Out of total of 117 students, 56 which is 48,3% strongly agree that learning applications help them to become more independent learners. While 49 students equivalent to 42,2% agree on that, 10 others who represent 8,6% are undecided about it. And 1 student equivalent to 0,9% disagrees that learning applications help them to become a more independent learner.

All the students surveyed have been exposed to learning applications due to the current conditions where learning has turned into virtual learning. As a result, most of the learning applications applied by their professors are not focusing at all on students' independence for learning.

Item 4: Do you consider that learning web applications help you to learn at your own speed?

Table 14. Students' learning speed.

Frequency	Students	Percentage
Strongly agree	52	44,4%
Agree	56	47,9%
Undecided	6	5,1%
Disagree	3	2,6%
Strongly disagree	0	0%

Author: Guaman, F. (2021)

Source: Students' survey directed to intermediate students at CTT de los Andes Language Center.

Item 5: Does your teacher use interactive applications where you receive individual feedback?

Table 15. Monitor and individual feedback.

Frequency	Students	Percentage
Always	68	58,1%
Usually	40	34,2%
Sometimes	6	5,1%
Almost never	1	0,9%
Never	1	0,9%

Author: Guaman, F. (2021)

Source: Students' survey directed to intermediate students at CTT de los Andes Language Center.

Analysis and Interpretation

The results show that 68 students, which is equivalent to 58,1% of the total population evaluated, said that their teacher always uses interactive applications where individual feedback is received, while 40 students which are equivalent to 34,2% said that their teacher usually uses them. In addition, 6 students that represent 5,1% mentioned that their teacher sometimes uses interactive applications where individual feedback is received, 1 student that represents 0,9% said that his teacher almost never uses them, and 1 student which is equivalent to 0,9% said that his teacher never uses them.

Most students consider that the applications used in class are not at all interactive and do not allow them to receive individual feedback. Having individual feedback provides students the chance to learn by themselves. Students who receive individual feedback find out by themselves ways to improve their learning.

Item 6: Which of the following blended applications are you familiar with? (More than one answer was allowed)

Table 16. Blended-applications.

Frequency	Students	Percentage
Kahoot	92	30,8%
Quizizz	62	20,7%
Flipgrid	65	21,7%
Social media pages (Facebook, Youtube, Whatsaap)	59	19,7%
Nearpod	21	7%

Author: Guaman, F. (2021)

Source: Students' survey directed to intermediate students at CTT de los Andes Language Center.

Analysis and Interpretation

Out of a total of 117 students, 92 which represents 30,8% mentioned that one of the blended-applications, they are most familiar with is Kahoot, while 65 students which are 21,7% picked Flipgrid as the one they are most familiar with. Also, 62 students equivalent to 20,7% chose Quizizz as the blended application they are most familiar with, 59 students equivalent to 19,7% said that social media pages are the ones

they are most familiar with. Finally, 21 students equivalent to 7% said that the blended application they are most familiar with is Nearpod.

All the students surveyed, are under virtual classes so they have been exposed to some blended-applications and some of the applications mentioned they were familiar with. In the same way, it is clear that just 7% of students had been exposed to one of the best interactive blended-application that is Nearpod.

2.4. Research proposal

The implementation of learner-centered classrooms through the use of blended learning applications.

CTT de los Andes Language Center Background

CTT de los Andes Language center began as a Uniandes University necessity since its students need to learn one of the most important languages spoken around the world, which is English. CTT de los Andes Language Center main building is located in Ambato, and its branches are located in cities like Puyo, Riobamba, Quevedo, Babahoyo, Santo Domingo, Ibarra y Tulcán in face-to-face and distance learning modalities.

Background

CTT de los Andes Language Center teachers are currently applying teacher-centered classes. So, it was determined throughout the results' analysis to apply a workshop under the topic "Implementation of blended-learning applications to create learner-centered classrooms" which is intended to be extremely beneficial for students who will become independent learners by applying critical thinking skills and research skills. In addition, the mentioned workshop mainly includes blended applications which promote learner-centered classrooms such as Nearpod, LearningApps and, Quizizz.

Objective

To demonstrate and promote learner-centered classrooms through the implementation of blended learning applications such as Nearpod, LearningApps, and Quizizz with CTT de los Andes Language Center teachers.

Development of the proposal

The development of this proposal consists of 2 stages, which are described below.

Stage 1

The professors of the CTT of the Andes are considered at this level. The usefulness of socialization involving extended reading is assessed at this point. This stage is conducted using a Google Forms survey that includes questions about the benefits of implementing blended learning applications to create learner-centered classrooms.

Stage 2

This stage focuses on the workshop's development. The interaction takes place through Zoom with full-time teachers from CTT de los Andes, so that teachers can learn about the benefits of implementing blended applications in their classrooms and how it will help them to create a learner-centered environment. The training lasts about sixty minutes. The trainer uses didactic material suitable for the appropriate explanation of the topic. It is vital to note that during the training, teachers have the opportunity to ask questions. Finally, teachers are given a survey to complete in order to assess the workshop's success.

The approach to be used in the creation of this proposal is the ADDIE technique (Analysis, Design, Development, Implementation, and Evaluation). The usage of this process provides for a more effective proposal implementation. The development of each section of the methodology is depicted in the charts below.

Table 17. Development of phase 1

Phase 1: Analysis	
Information	Course name: Implementation of learner-centered classrooms through the use of blended learning applications.
Profile of trainees	Gender: Male and Female Quantity: 10 Institution: CTT de los Andes Language Center
Resources	Zoom platform Nearpod, LearningApps, and Quizizz applications

Contents	Google Forms Survey Nearpod, LearningApps, and Quizizz applications demonstrations in order to show their usage and application to promote learner centered classrooms.
Tutor	Fernanda Guaman
Time	24 hours

Source: Own elaboration

Table 18. Development of stage 2

Stage 2: Design	
Objective	To demonstrate and promote learner centered classrooms through the implementation of blended learning applications such as Nearpod, LearningApps, and Quizizz with CTT de los Andes Language Center teachers.
Evaluation	Trainee question round.
Ways to share information	Class environment (Teacher-students) Blended applications demonstration
Planning	<p>Part 1: Introduction</p> <p>Greetings and welcome</p> <p>Agenda</p> <p>Part 2: Presentation of the methodology</p> <ul style="list-style-type: none"> • Definition of learner centered classrooms • Demonstrations of blended learning applications usages • Applications exploration <p>Part 3: Benefits of learner centered classrooms</p> <ul style="list-style-type: none"> • Advantages of promoting learner centered classrooms • Advantages of using blended learning applications <p>Part 4: Discussion</p> <ul style="list-style-type: none"> • Reception of questions and answers through google forms survey • Farewell

Source: Own elaboration

Table 19. Development of stage 3

Stage 3: Development	
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Content Development	The workshop will be created with the use of technology tools like Zoom and Power Point. It will be developed with the participation of CTT de los Andes' full-time teachers, as well as the coordinator of the Ambato extension. The workshop's date will be set by the coordinator.
Trainer's Materials	<ul style="list-style-type: none"> • Nearpod, LearningApps, Quizizz applications • Power Point Slides • Zoom
Trainees Activities	<ul style="list-style-type: none"> • Answering questions • Students' role • Survey
Purpose	The main objective of this proposal is to provide teachers with essential information about blended applications that can be used in order to implement learner centered classrooms.

Source: Own elaboration

Table 20. Development of stage 4

Stage 4: Implementation	
Published Material	Nearpod lesson/ Power Point Presentation Slides
Revision	Fernanda Guaman
Administration	CTT de los Andes
Approval for development	Mg. Cristina Salazar- CTT de los Andes Ambato Extension Coordinator.

Source: Own elaboration

Table 21. Development of stage 5

Stage 5: Evaluation	
Workshop Evaluation	Teachers' responses about the course collected by Google Forms
Economic Resources	Office Supplies \$10 Material Development \$50 Total: \$60
Cost of the course for trainees	None

Source: Own elaboration

This administration is mostly carried out by the educational institution, which is closely involved in the project's overall implementation. Under the leadership of the

person in charge of the research, the educational institution's professors are in charge of controlling, organizing, planning, and executing the proposal. The following charts, on the other hand, depict the human, material, and financial resources available for the proper development of the socialization proposal.

Table 22. Human resources available for the proposal

Human Resources	
1	Teacher Trainer
2	“CTT de los Andes” Language Center staff
3	Institution Coordinator

Source: Own elaboration

Table 23. Material resources available for the proposal

Material Resources	
1	Zoom platform/ Power Point Slides
2	Internet
3	Office Supplies
4	Audio and video resources

Source: Own elaboration

Table 24. Financial resources available for the proposal

Financial Resources	Budget	Total
1 Office Supplies	\$ 10	\$ 10
3 Material Development	\$ 50	\$ 50
4 Paperwork	\$ 30	\$ 30

Source: Own elaboration

Workshop performance: The implementation of learner-centered classrooms through the use of blended learning applications

An ESL online workshop was carried out on May 14, 2021, with full-time teachers of CTT de los Andes Language Center. It lasted one hour. It was presented to teachers as a professional development course.

At the beginning of the presentation, teachers were asked to open a link where they were able to follow the activities by participating actively during the workshop. The link sent was a Nearpod link. Nearpod is one of the blended applications introduced as a good option to create learner-centered classrooms.

First, teachers were given a lesson where they pretended to be students under the lesson “Relationships”. In that lesson, students were asked to participate collaboratively on a board given their personal answers. Then, they had to work on a board where they were able to use different tools such as images, pencils, colors, and text. After that, students matched some words with some pictures in just thirty seconds. Finally, they presented an interactive video where they answered some questions based on the video.

Second, teachers were asked to explore Nearpod from a teacher’s perspective. Because of time, teachers were given some minutes to explore the app and try to create an interactive lesson. As the workshop was going through, some questions came up such as evaluation process and timing issues. So the instructor demonstrated how to download class reports and how to set up time in activities.

Third, LearningApps activities were introduced to teachers under the topic “Medicine vocabulary”. Teachers were asked one more time to pretend to be students so they can see how the teacher manages the class by using LearningApps activities. They presented a memory game, a word search, a racing competence, and a category activity. Furthermore, teachers experienced the collaborative way those applications can be managed.

Finally, because of the time the instructor just introduced how to use Quizizz in an interactive mode. Quizizz is offering a lesson mode where teachers can manage all the lesson process by being connected with students lively. Some teachers got curious about its usage because most of them have been working with that application and had not realized that lessons mode offers them the opportunity to change teachers’ role to a facilitator rather than a teacher.

Workshop presentation

Nearpod

Nearpod is a blended learning application that combines engaging media and formative assessments to make lessons interactive. It was created by three Argentine friends who launched their education-technology company in South Florida in 2012. Nearpod lessons promote collaborative and engagement activities

such as polls, open-ended questions, quizzes, draws, and more. Also, teachers can add videos from their own or YouTube, media resources like power points, and google slides. It gives you the opportunity to monitor class pace or in students pace mode students can work at their own pace. This application shows you reports of student's work.

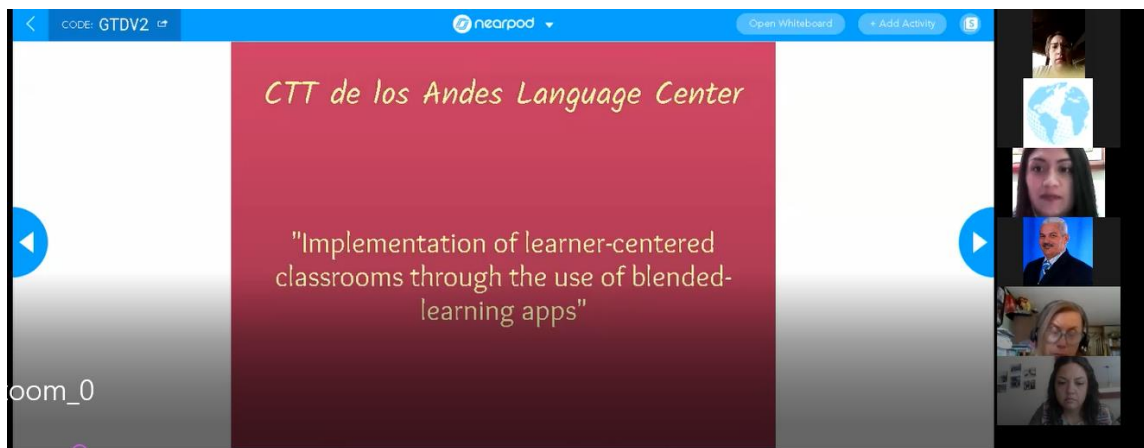


Figure 1. Image of Workshop presentation Nearpod.
Author: Guaman, F (2021)

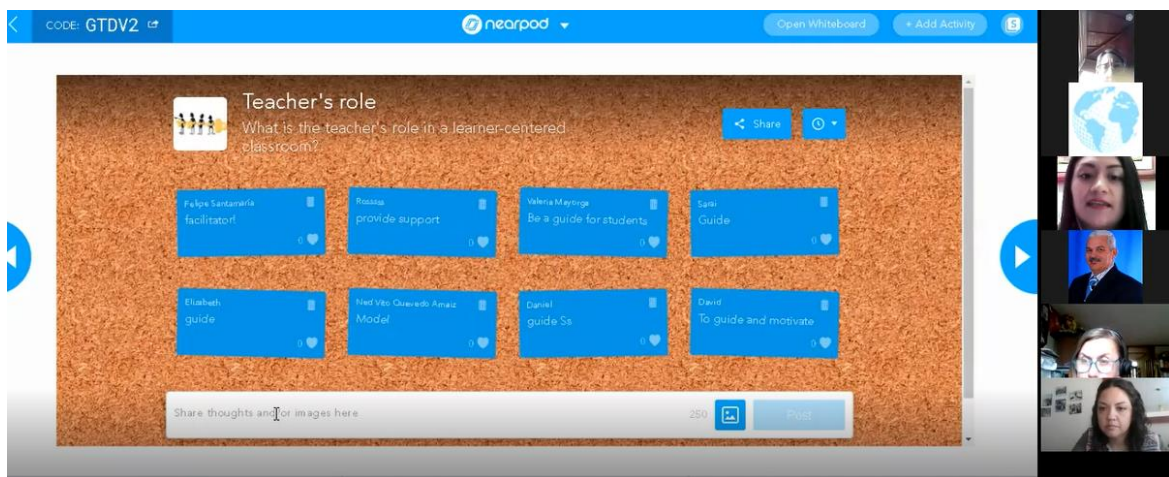


Figure 2. Collaborative board.
Author: Guaman, F (2021)

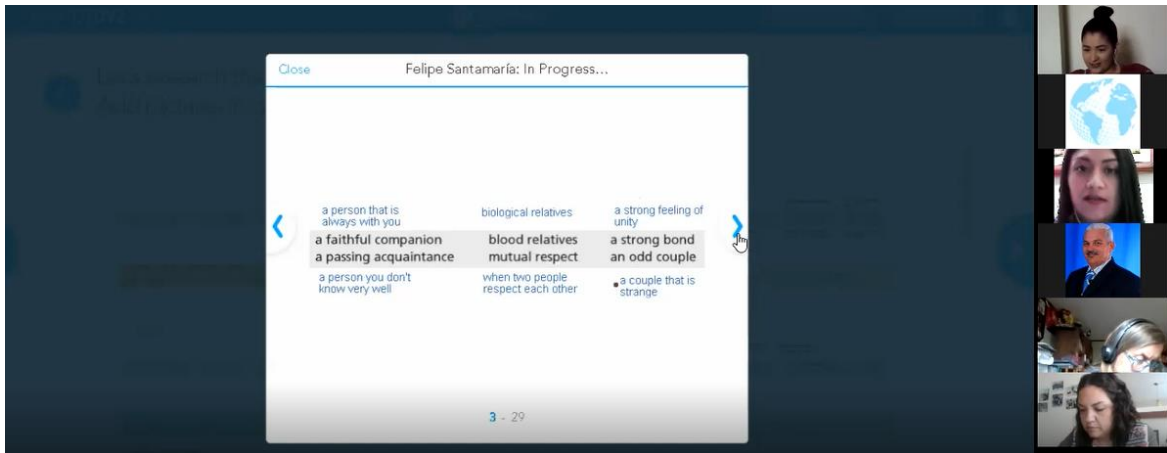


Figure 3. Drawing board.
Author: Guaman, F (2021)

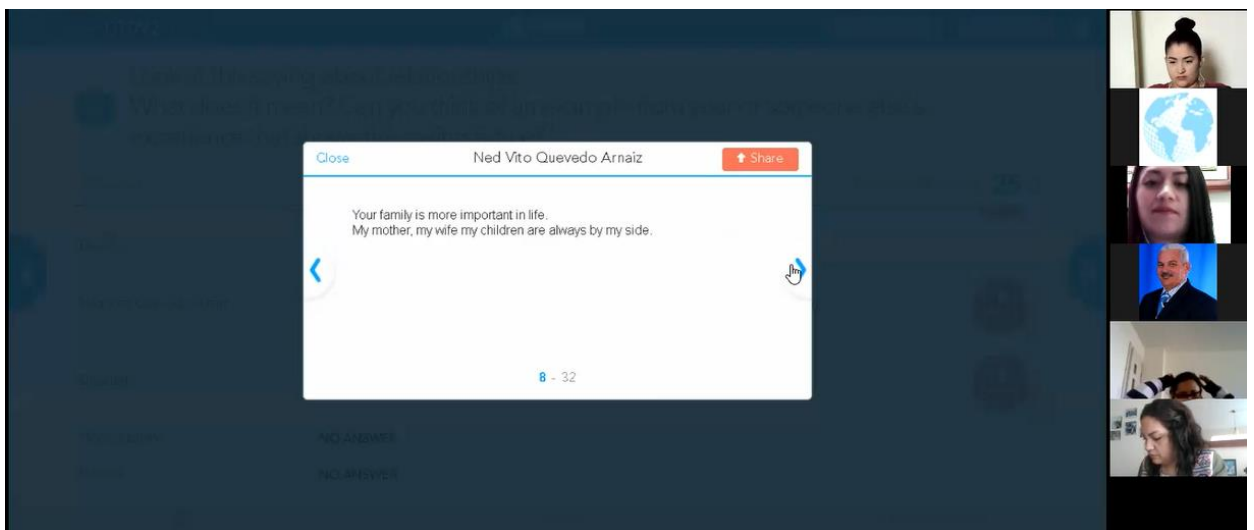


Figure 4. Open-ended questions.
Author: Guaman, F (2021)

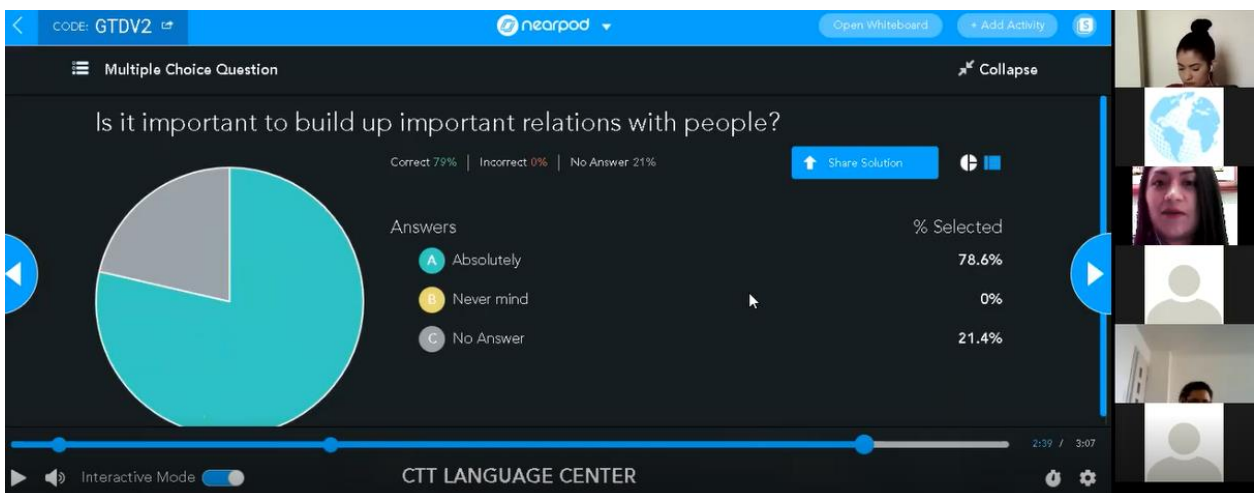


Figure 5. Interactive videos.
Author: Guaman, F (2021)

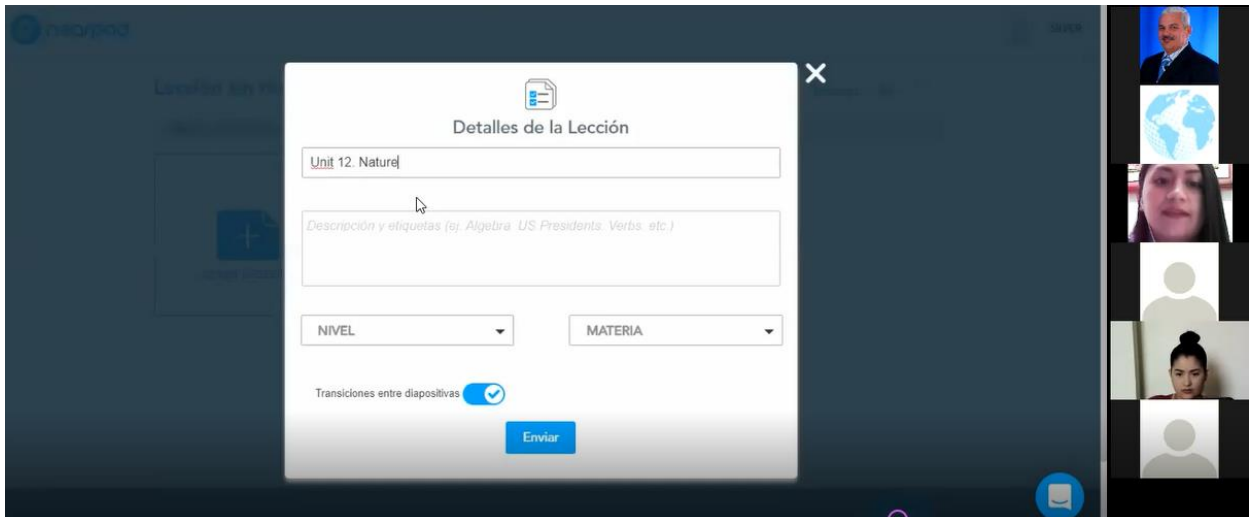


Figure 6. Teachers' exploration.
Author: Guaman, F (2021)

LearningApps

LearningApps was created as part of a research and development project at the University of Education Bern, Johannes Gutenberg University Mainz, and the University of Zittau in 2012. This learning application is free and offers interactive, multimedia-based learning nuggets like choosing (multiple choice question, closed test, marking texts, millionaire game), matching (pair game on images/maps/group-puzzle), sequences (simple order, number line), writing (free text input, select quiz, crossword, hangman, fill-in tables), multi-player games (horse racing, estimation, where is that?), and tools (app matrix, audio/ video with notices, chat, calendar, mind map, pinboard, writing).

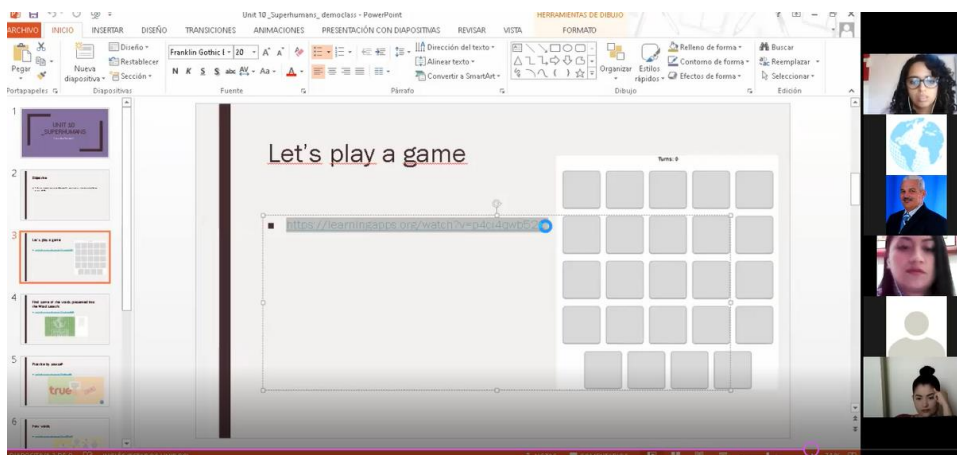


Figure 7. Matching pair game.
Author: Guaman, F (2021)

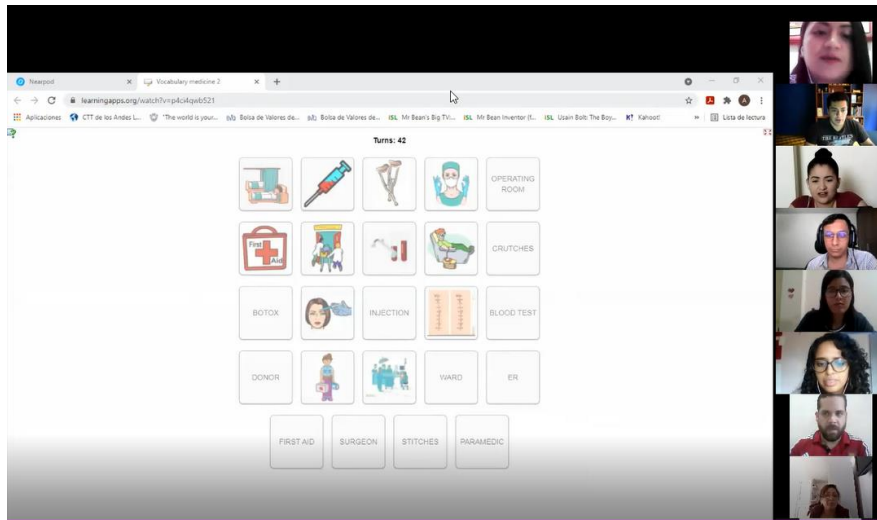


Figure 8. Images pair game.
Author: Guaman, F (2021)

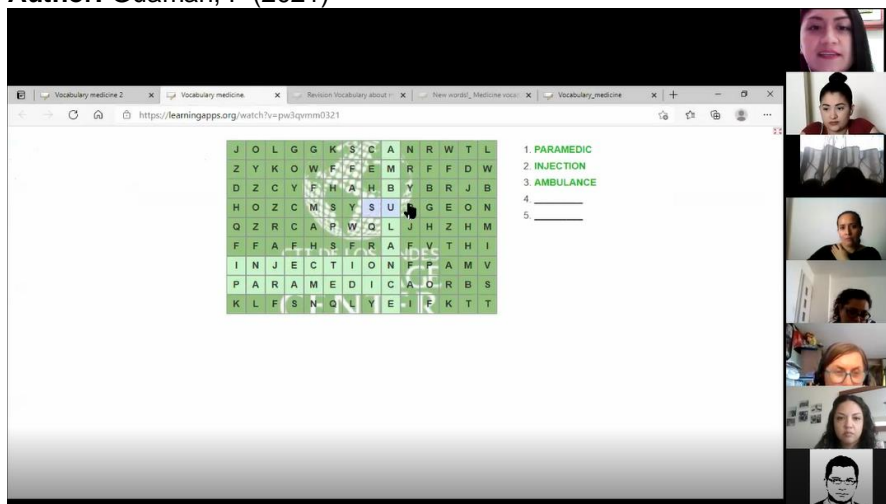


Figure 9. Writing word search.
Author: Guaman, F (2021)

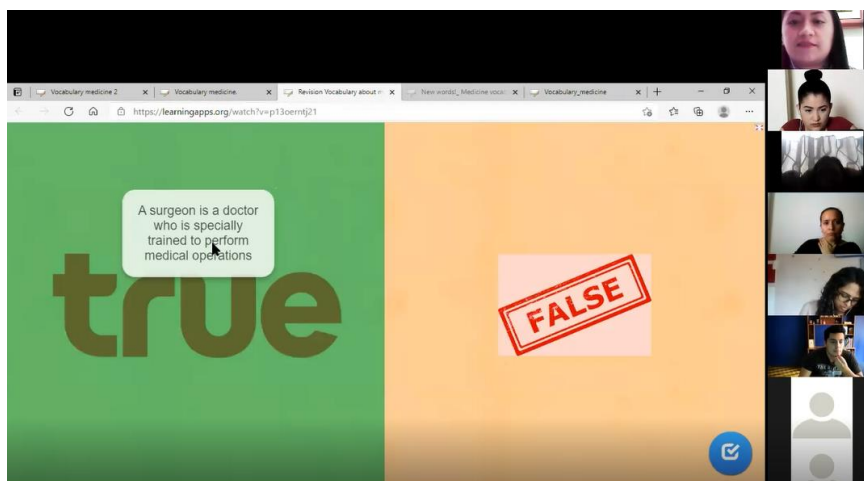


Figure 10. Drag activity.
Author: Guaman, F (2021)

CHAPTER III: ANALYSIS OF THE PROPOSAL RESULTS

3.1. Workshop evaluation

At the end of the presentation, some questions are asked to the attendances in order to see what the workshop impact is.

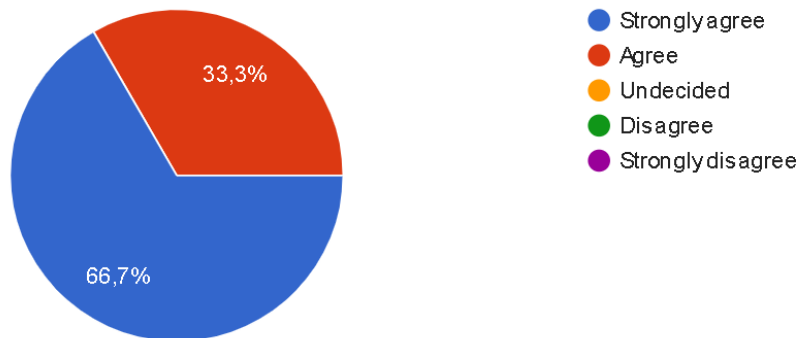


Figure 11. Teachers' feeling towards blended applications usage

Author: Guaman, F (2021)

Analysis and Interpretation

Teachers are interviewed about how they felt by using blended applications and 66,7 % of the participants strongly agree that they felt that the teacher's role was more as a facilitator than as the center of the class. While 33,3% of the participants agree with that idea. Consequently, it can be said that teachers through the workshop realized how the teacher's role can change in order to become a facilitator during class.

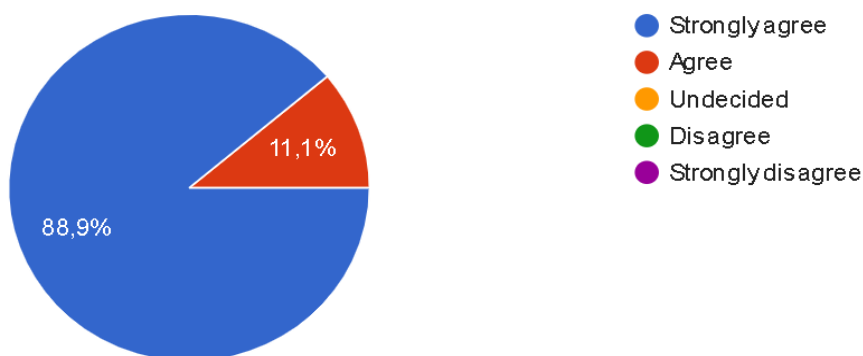


Figure 12. Implementation of blended applications to promote learner-centered classrooms

Author: Guaman, F (2021)

Analysis and Interpretation

According to the survey, it can be seen that 88,9% of the teachers' interviewed strongly agree on considering the importance to implement blended applications in their classes to promote learner centered classrooms while just 11,1 % of the teachers just agree on the idea. Based on what is said, we can conclude that learner-centered classrooms could be implemented at CTT de los Andes Language Center.

Nearpod
The best was nearpod because you can see what the students learn during classes
I think Neaport is strongly useful to check students' development in class.
Nearpod because it is interactive
Nearpod, it allows students to be in charge of their learning.
nearpod
Nearpod because you can monitor students' participation easily.

Figure 13. Blended applications that teachers' considered more useful
Author: Guaman, F (2021)

Analysis and Interpretation

In figure 25, it can be seen that most of the attendances to the workshop consider that the blended application most useful from the introduced ones was Nearpod. Some of the teachers' comments state that by using that application students are in charge of their learning. Also, as it is interactive the teacher can monitor students learning through the class.



Figure 14. Possible implementation of blended applications in class
Author: Guaman, F (2021)
Analysis and Interpretation

In figure 26, teachers were asked if they think it is possible to implement blended applications in their classes to promote learner-centered classrooms. Clearly, it can be said that they think it is always possible to implement them. In my opinion, most of the teachers interviewed were willing to apply the blended learning applications in their classes. During the workshop, teachers were introduced to the benefits that a learner-centered class has so they demonstrate a lot of interest to implement the applications shown.

Learner class because they can be become active participators in class.
Learner-centered class because the students must participate and speak more and more in order to boost their knowledge.
Learner-centered class
Learner centered because students will do the work.
Learner-centered because they need to be able to learn from their experience.
Learner- centered class, because it helps students to learn at their own speed and pace.
Learner-centered is the new norm because it empowers students to be autonomous and motivated them.
Learner-centered class because students learn more when they are the main participants in the learning

Figure 15. Teachers' opinion towards teacher centered and learner centered method
Author: Guaman, F (2021)

Analysis and Interpretation

According to Figure 27, teacher's opinion towards the most suitable teaching method to apply in their classes is learner-centered rather than teacher-centered. Some of the reasons given by the teachers are students' autonomy, motivation, pace of learning, and mainly active students' participation. By the workshop presented teachers had the chance to experiment as students and the comments provided are based on what they experienced though the workshop.

3.2. Workshop conclusions

- The use of blended learning applications was promoted through a workshop in which teachers interact with the presenter by asking questions about the use of the applications presented into a learner centered context.
- It was demonstrated how learner –centered classrooms can be implemented using blended-learning applications such as Nearpod, LearningApps, and Quizizz with CTT de los Andes Language Center teachers.
- Teachers of CTT de los Andes Language Center were fully provided with essential information about blended applications that can be used in order to implement learner centered classrooms.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- Having checked the theoretical input of blended learning applications, it has been determined that blended learning applications highly influence the creation of learner-centered classrooms. Consequently, Nearpod, LearningApps, and Quizizz blended applications have been considered the most suitable applications to promote students' learning independence.
- By using blended-learning applications teachers' role has changed to a facilitator who provides students opportunities to develop their independent learning into a learner-center class context.
- Based on the results obtained, a workshop was designed under the topic "Implementation of blended learning applications to create learner-centered classrooms". With the intention of demonstrating blended learning applications such as Nearpod, LearningApps, and Quizizz with CTT de los Andes Language Center teachers.
- The workshop presentation was evaluated through the use of a survey which consisted of close and open questions, where all the teachers answered positively to the implementation of blended learning applications.

Recommendations

- Blended applications such as Nearpod, LearningApps, and Quizizz need to be used in order to create learner-centered classrooms due to their several benefits.
- Blended learning applications should be used into learner-centered classrooms context in order to focus the learning process mainly in the student.
- Educational authorities in our country should implement regular seminars where teachers can share their expertise in a topic to build up their teaching professional development.

- It is highly recommended to record teacher's professional development workshops that have taken place in an institution to have a database for future teachers' generations. Consequently, new teachers in an institution will know how the institution has been working and determine which methods have succeeded and which ones not.

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ANNEXES**Annex N° 1: Approval request**

Ambato, 5 de abril de 2021.

Mg. Cristina Salazar
Coordinadora Académica a Nivel Nacional
CTT de los Andes Language Center
Presente,

De mi consideración:


Yo **Fernanda Raquel Guamán Rivera** con C.I **1804625836** estudiante de la Maestría en la Pedagogía de la Enseñanza del Idioma Inglés como Lengua Extranjera en la Pontificia Universidad Católica del Ecuador Sede Ambato, solicito muy comedidamente se digne en otorgar el respectivo permiso para realizar mi investigación de tesis la cual tiene como tema: "CREATING LEARNER-CENTERED CLASSROOMS THROUGH THE IMPLEMENTATION OF BLENDED-LEARNING APPLICATIONS".

Por la favorable atención dada a la presente, anticipo mis agradecimientos.

Atentamente,



Lic. Fernanda Guamán
Docente de CTT Language Center

 **Cristina Salazar** <cttlc.coordinacionacademica@cttdelosandes.com>
para mí ▾

lun, 5 abr 14:36 ☆ ↶ ⋮

Autorizado.

--

Lic. Cristina Salazar Mg.

CTT DE LOS ANDES LANGUAGE CENTER

COORDINACIÓN ACADÉMICA NACIONAL

Teléfono: 03 2829051

Ambato-Ecuador



Annex N°2: Survey validation




Pontificia Universidad Católica del Ecuador
Sede Ambato
Maestría en Pedagogía del Idioma Inglés como Lengua Extranjera
Validity Instrument (Students' survey: <https://forms.gle/DhMvDpbWm6dv2BxD8>)

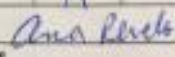
Item	A. Instrument Questions correspond to the objectives and variables.		Observation	B. Technique quality and representability				Observation	C. Language		Observation
	A (Adaptation)	NC (Nonconformity)		O (Optimum)	G (Good)	F (Fair)	I (Inefficient)		A (Adequate)	I (Inadequate)	
1	X			X					X		
2	X			X					X		
3	X			X					X		
4	X			X					X		
5	X			X					X		
Validator Data	Cristina Elizabeth Salazar Paedez		1803694460				Cristina				
	English teacher		Language Center Director				09/04/2021		0984083986		
	Full name		ID number				Signature				
	Profession		Position				Date		Telephone		



Pontificia Universidad Católica del Ecuador
Sede Ambato
Maestría en Pedagogía del Idioma Inglés como Lengua Extranjera
Validity Instrument (Students' survey: <https://forms.gle/DhMvDpbWm6dv2BxD8>)

Item	A. Instrument Questions correspond to the objectives and variables.		Observation	B. Technique quality and representability				Observation	C. Language		Observation
	A (Adaptation)	NC (Nonconformity)		O (Optimum)	G (Good)	F (Fair)	I (Insufficient)		A (Adequate)	I (Inadequate)	
1	X			X					X		
2	X			X					X		
3	X			X					X		
4	X			X						X at your own pace	
5	X			X					X		
Validator Data	Carlos Felipe Sotomayor Velasco		1804878849								
	Full name		ID number				Signature				
	English Teacher		Teacher at CTT Language Center				07/04/2021		0995443513		
	Profession		Position				Date		Telephone		

Pontificia Universidad Católica del Ecuador
Sede Ambato
Maestría en Pedagogía del Idioma Inglés como Lengua Extranjera
Validity Instrument (Students' survey:)

Item	A. Instrument Questions correspond to the objectives and variables.		Observation	B. Technique quality and representability				Observation	C. Language		Observation
	A (Adaptation)	NC (Nonconformity)		O (Optimum)	G (Good)	F (Fair)	I (Insufficient)		A (Adequate)	I (Inadequate)	
1		X	web applications		X				X		
2	X		"	X					X		
3	X			X						X a more independent learner	
4	X			X					X	X your own speed?	
5	X			X					X		
Validator Data	Ana Revelo		1802385052								
	Full name		ID number				Signature				
	Eng. Teacher		English Teacher				10/04/21		0997114082		
	Profession		Position				Date		Telephone		



Pontificia Universidad Católica del Ecuador
Sede Ambato
Maestría en Pedagogía del Idioma Inglés como Lengua Extranjera
Validity Instrument (Teachers' survey): <https://forms.gle/fw1Vhj6BqWYG5zgj6>

Item	D. Instrument Questions correspond to the objectives and variables.		Observation	E. Technique quality and representability				Observation	F. Language		Observation
	A (Adaptation)	NC (Nonconformity)		O (Optimum)	G (Good)	F (Fair)	I (Inefficient)		A (Adequate)	I (Inadequate)	
1	X			X					X		
2	X			X					X		
3	X			X					X		
4	X			X					X		
5	X			X					X		
Validator Data	Cristina Elizabeth Salazar Pareles		1803694460				Cristina				
	Full name		ID number				Signature				
	English teacher		Language Center Director				09/04/2021		0984083986		
	Profession		Position				Date		Telephone		



Pontificia Universidad Católica del Ecuador
Sede Ambato
Maestría en Pedagogía del Idioma Inglés como Lengua Extranjera
Validity Instrument (Teachers' survey): <https://forms.gle/fw1Vhj6BqWYG5zgj6>

Item	D. Instrument Questions correspond to the objectives and variables.		Observation	E. Technique quality and representability				Observation	F. Language		Observation
	A (Adaptation)	NC (Nonconformity)		O (Optimum)	G (Good)	F (Fair)	I (Inefficient)		A (Adequate)	I (Inadequate)	
1	X			X					X		
2	X			X					X		
3	X			X					X		
4	X			X					X		
5	X			X					X		
Validator Data	Carlos Felipe Santamaría Velasco		1804878849				Carlos Felipe Santamaría				
	Full name		ID number				Signature				
	English Teacher		Teacher at CTT Language Center				09/04/2021		0995443513		
	Profession		Position				Date		Telephone		

Pontificia Universidad Católica del Ecuador
Sede Ambato
Maestría en Pedagogía del Idioma Inglés como Lengua Extranjera
Validity Instrument (Teachers' survey):

Item	D. Instrument Questions correspond to the objectives and variables.		Observation	E. Technique quality and representability				Observation	F. Language		Observation
	A (Adaptation)	NC (Nonconformity)		O (Optimum)	G (Good)	F (Fair)	I (Insufficient)		A (Adequate)	I (Inappropriate)	
1		X	Web application		X				X		
2	X			X						X	consider THAT
3	X			X					X		more independent learners
4	X		Web application	X					X		learn at their own...
5	X			X						X	studying and practice and practice
Validator Data	Ana Revelo		1902385052				Ana Revelo				
	Full name		ID number				Signature				
	English Teacher		English Teacher				10/04/21		099 7114082		
	Profession		Position				Date		Telephone		