

**UNIVERSIDAD MAYOR DE SAN ANDRÉS**  
**FACULTAD DE HUMANIDADES Y CIENCIAS DE LA EDUCACIÓN**  
**CARRERA DE LINGÜÍSTICA E IDIOMAS**



**PROFESSORS` ATTITUDES TOWARD THE USE OF E-LEARNING IN  
TEACHING-LEARNING PROCESSES IN TIMES OF PANDEMIC AT  
FRANZ TAMAYO UNIVERSITY**

Thesis submitted to obtain the Linguistics and Languages Degree

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UNIVERSITY**

Presentado por:

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**DEDICATORY**

*This work is dedicated with all my  
love to my parents Max Flores  
Churqui and Lucía Flores Poma.*

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## **ABSTRACT**

This study, through the theoretical systematization and analysis of the data obtained, in relation to the use of e-learning in the teaching-learning processes and the attitude shown by the professors of the Franz Tamayo University, in this situation, aims to generate spaces for dialogue and reflection on the pedagogical practices that are being developed, especially in higher education.

This is due to the fact that the coronavirus disease (COVID-19) has caused an unprecedented crisis. For this reason, educational measures have been adopted, such as the suspension of face-to-face classes at all levels, which has given rise to the proposal of learning modalities related to virtual education with the support of technological resources and tools.

According to the results, it could be evidenced that, in view of the obligatory nature of handling virtual environments provided by e-learning due to the general confinement caused by the pandemic, the professors of the aforementioned university showed a favorable attitude towards this new educational context. In addition, the analysis carried out on the subject of research allowed to value the tools provided by e-learning, which constitute didactic resources that can be used in the teaching-learning processes.

Therefore, the strategies are to re-signify the teaching-learning processes and to understand that the relationship between students and professors is not only determined by the spatiality of the classroom, but also by the generation of flexible and enriched educational environments, in addition to requiring additional efforts from educational institutions at the higher level.

Finally, it was concluded that the implementation of classes in a completely virtual environment entails a profound transformation of the learning paradigms that currently no longer require a specific place and time; on the contrary, these activities are governed by the principle of connectivity, which in turn is the fundamental theory on which ubiquitous learning is based.

## RESUMEN

El presente estudio, a través de la sistematización teórica y el análisis de los datos obtenidos, en relación al empleo del e-learning en los procesos de enseñanza-aprendizaje y la actitud demostrada, por los docentes de la Universidad Franz Tamayo, frente a esta situación, pretende generar espacios de diálogo y reflexión sobre las prácticas pedagógicas que se van desarrollando especialmente en educación superior.

Todo ello debido a que la enfermedad del coronavirus (COVID-19) ha provocado una crisis sin precedentes. Razón por la cual, se han adoptado medidas relacionadas con el ámbito educativo, como ser la suspensión de las clases presenciales en todos los niveles, lo que ha dado origen a la propuesta de modalidades de aprendizaje relacionadas con la educación virtual con el apoyo de recursos y herramientas tecnológicas.

De acuerdo a los resultados, se pudo evidenciar que, ante la obligatoriedad de manejar entornos virtuales debido al confinamiento general ocasionado por la pandemia, los docentes de la mencionada universidad demostraron una actitud favorable hacia este nuevo contexto educativo. Además, el análisis realizado, permitió valorar las herramientas proporcionadas por el e-learning, los cuales se constituyen en recursos didácticos que se pueden utilizar en los procesos de enseñanza-aprendizaje.

Por lo tanto, las estrategias pasan a resignificar los procesos de enseñanza-aprendizaje y a entender que la relación entre estudiantes y docentes no está determinada únicamente por la espacialidad del aula, sino por la generación de entornos educativos flexibles y enriquecidos, además de requerir esfuerzos adicionales de las instituciones educativas a nivel superior.

Finalmente, se llegó a la conclusión de que la implementación de clases en un entorno completamente virtual conlleva una transformación profunda de los paradigmas de aprendizaje que en la actualidad ya no precisan de un lugar y un tiempo determinado, más por el contrario, estas actividades están regidas bajo el principio de conectividad, la cual a su vez es la teoría fundamental sobre la cual se basa el aprendizaje ubicuo.

## INTRODUCTION

Since the beginning of the 80s of the last century, the new information and communication technologies, called ICT, together with the evolution and growth of the internet network, have been making their way into all subjects of human activity, especially education. That is why e-learning, applied to different educational levels as a virtual learning space, and has been introduced, being higher education the most involved in this issue. It should be noted that, due to this current context of confinement by the pandemic, which plagues the entire world population, the implementation of e-learning has undergone an excessive and unexpected acceleration.

E-learning is understood as all virtual classrooms which come in several variations including distance education, electronic learning, and online learning, among others. Then, e-learning consists of any courses that are specifically distributed via internet to somewhere other than the physical classroom, but preserve a similar learning environment where students can learn with direct interaction from teachers and professors.

It is evident that the implementation of technology in teaching-learning processes has contributed to the development of academic activities in a virtual way. However, this situation has caused some conflict in educational actors, especially with professors, who have not fully prepared to face this new scenario. This fact has forced professors, in addition to teaching their regular classes, to also be involved in training courses on how to use the new educational platforms along with their extensive resources and tools and then implement them in their respective classes.

Consequently, the professor's routine has passed through many changes, changes that have affected their work as mediators of the educational act, since they are almost obliged to implement e-learning to manage their academic planning in a virtual way, taking advantage of the benefits and avoiding the limitations that technology may present at the time of its application.

It cannot be denied that ICT and e-learning are tools that can be used to optimize teaching-learning processes, improving different aspects such as: information search, communication, socialization among participants, as well as the collaborative work and knowledge construction, so it is extremely important the relevant intervention of professors so that these aspects take the corresponding relevance in the aforementioned processes.

Therefore, in the current context, the university professor has become a fundamental part of this process of adapting the virtual environment with the needs of the students. It is in this sense that, in order to carry out this integration, the attitude and aptitude of the professor are key aspects so that traditional practices are left in the past, giving way to the use of new methodologies related to connectivism and ubiquitous learning.

The purpose of this research study is precisely to analyze professors' attitudes of The Franz Tamayo Private University regarding the integration of e-learning in educational planning as a fundamental tool for building quality education in pursuit of change and innovation. This research tries to collect and analyzes different opinions, perspectives and especially the attitude, shown by professors, regarding the use of e-learning in teaching-learning processes in this higher educational center.

Methodologically, the study has a mixed research approach, i.e. qualitative-quantitative, with a descriptive non-experimental research design, for which a probabilistic sample was determined that helped to meet the proposed objectives using survey and interview techniques.

Finally, it is emphasized that the constant demands for updating and the accelerated changes that occur in the educational context demand from professors better planning regarding the use of virtual scenarios, represented by e-learning, and the use of ICT in the higher education system, since the correct and pertinent use of virtual platforms is conditioned by the opinion and expectations that professors have regarding the use of these resources and tools.

## **CHAPTER I**

### **PROJECT PROPOSAL**

#### **1.1. STATEMENT OF THE PROBLEM**

Due to the fact that whole world has been fighting the invisible enemy coronavirus (COVID – 19), which has been killing thousands of people around the world, according to a report by the World Health Organization (2020), all activities especially educative issues, are restricted to prevent the spread of this virus. The use of e-learning is deemed not optimal in the implementation of virtual classes, because students usually learn in class face-to-face, this new context has forced them to pass classes in a way that they are not entirely used to.

This is the case of The Franz Tamayo University, at its El Alto campus, which offers learning modalities at the undergraduate and graduate levels. The aforementioned academic unit has modern facilities and infrastructure adapted to the new learning trends and dynamics; however, it was not exempt from the confinement and temporary closure measures taken due to the pandemic, which forced to make decisions about the learning modalities to give continuity to the academic management. This is where the virtual modality comes in, with the use of resources and technological tools typical of e-learning.

It is evident that e-learning was a way of teaching complementary to face-to-face classes and that its application was not mandatory but optional in the sectors that required it, however, in this new context of confinement due to the pandemic, it became mandatory scenarios, forcing both professors and students to redirect the ways of teaching and learning, respectively.

Most of professors and students' formal teaching-learning processes take place in universities, colleges or institutions of higher education. The closure of these buildings and the move to a remote learning environment may result, on the one hand, that students

spend less time in learning, on the other hand, that professors feel that learning becomes meaningless for them. One of the factors is that learning is not carried out as the way it used to be, in physical classrooms, so the learning process is more focused in the form of assignments to students, in virtual classrooms. In addition, although these scenarios bring many advantages, the fact that instant feedback is not available makes students lose their motivation.

Moreover, according to Moorhouse (2020) “if there is a discussion, some become a silence reader and the responses from students are a little shorter”. The interaction process between control and the classroom environments is very influential on students, such as the enthusiasm of students that occurs in the classroom environment, but it will be different if students carry out learning at home. So that it does not cause high motivation.

However, it is evident that educational systems have been changing with the expansion of new technologies. More and more educational institutions, especially higher education institutions, have formalized the use of Information and Communication Technologies (ICT) in education through ambitious plans based on the learning pace of students. An earlier study by Drago & Wagner (2004) revealed that students' learning styles in online learning tend to be more visual and stronger in reading and writing.

On the other hand, despite the good will and continuous attempts to improve the academic offerings of universities, there are still more difficulties to overcome to achieve the desired objectives, in terms of benefiting all students using the platforms proposed by these institutions, as Kusuma (2020) considers that "they are not yet effective, due to the limited infrastructure for some students".

This view is shared by Jones & Sharma (2019), who claim that:

Infrastructure is the main facility in the implementation of this online learning. The obstacle found is the use of the internet network which costs money and the ability of students to provide educational facilities online, lack of learning to be good at behavior, lack of self-discipline, and the environment when isolated at home.

However, without limitation of space and time, educational activities can be done anytime and anywhere; this is the so-called ubiquity principle. Moreover, in an era where there is no certainty when this pandemic will end, so e-learning is an absolute necessity that must be met by all people. Although formally educational activities can still be done online, because students have to study at home, character education during this pandemic has become a little neglected.

Formerly, when educational activities were carried out in universities, character education was carried out under the direct supervision of the professor or lecturer. Activities that support character education can also be carried out directly, intensively and the level of success can be measured. However, nowadays, when educational activities are carried out online, it is not possible to accurately measure whether the learning process or the transfer of knowledge is taking place in an appropriate form.

Many professors complain about student's participation when online learning takes place. Professors have difficulty determining whether students are taking learning seriously. Because it often happens, in e-learning, there are students who deliberately put up a video that has been recorded, so that it seems like they are following the learning process, but in fact they are doing something else such as cooking, helping their family, and so on.

According to Sacerdote (2011):

Students who are confined at home with their parents due to pandemic context may feel more stressed and anxious. It is well known that the college environment influences achievement through peer effects. Being in a classroom and having the opportunity to interact with classmates may produce important positive externalities.

Consequently, peer effects may operate through many different channels. Students may teach each other and get improvement together. Classmates' high achievements may motivate the student, through competition or social influence, to work harder.



Additionally, “Classroom activities provide a central role in helping students acquire social skills that have important implications for their future personal and professional growth” (Goodman, 2015). The interaction with professors and other students is found to be essential for the development of positive self-esteem, self-confidence, and a sense of identity. It also improves students’ ability to work in groups in collaborative and productive ways. There is significant evidence showing that social skills are positively associated with cognitive skills and school achievement.

For all of the above, it is important to know the professors’ attitudes in relation to the use of e-learning, to improve teaching-learning processes in the current pandemic context. Not only in order to incorporate class-based interaction and communication, but also, to promote and create new virtual scenarios in which meaningful learning can take place.

#### **1.1.1. Research question**

What attitudes do professors of Franz Tamayo University show regarding the use of e-learning in teaching-learning processes in pandemic times?

### **1.2. OBJECTIVES**

#### **1.2.1. General objective**

To analyze professors’ attitudes regarding the use of e-learning in teaching-learning processes in pandemic times

#### **1.2.2. Specific objectives**

- To describe professors’ attitudes regarding the use of e-learning in teaching-learning processes in pandemic times
- To identify types of professors’ attitudes regarding the use of e-learning in teaching-learning processes in pandemic times
- To evaluate the predisposition of professors regarding the use of e-learning in teaching-learning processes in pandemic times

## **1.3. JUSTIFICATION**

### **1.3.1. Educative justification**

The crisis caused by the coronavirus showed that Bolivian universities were not prepared, neither technologically nor academically, to face a 100% virtual educational context, leaving aside the usual face-to-face approach.

Although e-learning is not a new practice, its integration into academic activities has been partial and not very frequent. The pandemic forced universities to change their vision about the use of technological tools and resources. Therefore, an analysis of the posture and attitude of professors towards this new scenario is extremely necessary.

On the other hand, it is considered relevant to examine the concepts of e-learning, also, to analyze university professors' attitudes in virtual environments. In addition, it is necessary to know the professors' point of view on the use of e-learning in the teaching-learning processes in universities. Furthermore, it is essential to analyze how e-learning has changed the educational system and why the virtual classroom is important for the professor's development. Additionally, it is considered fundamental, for the educational context, to establish a relationship between pedagogy and technology.

In the context of the suspension of face-to-face classes and the possibility of a similar situation repeating itself, it is necessary to develop educational policies that make possible the continuity of learning throughout the educational system. Hence the importance of carrying out this study, which could well be a theoretical basis for proposing new ways of implementing the curriculum at the higher level, with adaptations and necessary adjustments according to each context.

### **1.3.2. Scientific justification**

The present research on professors' attitudes regarding the use of e-learning in teaching-learning processes in pandemic times is justified in the understanding that it responds to

the needs and problems of the current context within the teaching-learning processes that are being developed in the universities of Bolivia.

As mentioned above, the pandemic has transformed the contexts of curriculum implementation in a 100% virtual environment, not only because of the use of e-learning and the need to consider conditions different from those for which the curriculum was designed, i.e., a curriculum designed for face-to-face classes, but also because there are needs that are more relevant in the current context, such as integrating technology into the curriculum.

Therefore, it is necessary that educational policies undergo a substantial change, affecting not only professors and students, but also educational institutions at the higher education level. Such is the case of curricular adjustments and prioritization and the necessary contextualization to ensure the relevance of the contents in situations similar to the emergency situation that was experienced, based on consensus among all the actors in the educational field.

Hence the need to analyze the point of view and attitude shown by higher education professors in this new scenario, in order to have a precise approach to the adjustments that must be made, not only in the educational field, but also to the adjustments that must respond to the scientific progress of technological know-how in all areas of human knowledge.

The virtual classrooms, specific to e-learning, are relatively a new educative context that spans the universities and other institutions in Bolivia. It concentrates on utilizing computers or any electronic resources in academic courses can be delivered anywhere and anytime. As time passes, the growth of knowledge imposed new requirements for a better use of this asset. The emergence of information technology (IT) provides resources and tools for such management, until the new era of learning, namely the e-learning, poses its impacts on knowledge acquisition and utilization of the technology. This new trend in both knowledge and e-learning lets many educational institutional organizations in most parts of the world take the advantages of these technologies.

This paper addresses e-learning at the university environment and focuses on developing virtual courses. Likewise, it addresses the design issues of e-learning courses that can be used to capture the professors' attitudes. Therefore, the design of e-learning should be an important part of the university teaching-learning processes. The potential for utilizing e-learning in the university environment will optimize the resources, quality assurance factors and provide the university with a sustainable competitive advantage.

Higher education is constituted as a referent of social change that allows undergraduate students as a whole to conclude their studies in order to begin a new stage of professional practice. Therefore, the research aims to contribute to the current challenges of Bolivian education. It also intends to be a reference that will serve as a guide for further studies related to the topic of study.

#### **1.4. HYPOTHESIS**

The professors of Franz Tamayo University show a favorable attitude regarding the use of e-learning in the teaching-learning processes in pandemic times.

##### **1.4.1. Delimitation**

The study problem is mainly focused on analyzing the attitude shown by the professors of Franz Tamayo University, in the academic unit of the city of El Alto in the 2021 academic year, regarding the use of e-learning in the teaching-learning processes in times of pandemic.

The study is limited to higher education as part of the process of training professionals within the educational system of the Plurinational State of Bolivia. It is worth mentioning that during the aforementioned academic year, the restriction measures due to the pandemic were still in force, resulting in 100% virtual teaching-learning environments.

On the other hand, although the main population that is the object of this study is the professors who teach at the aforementioned university; however, since this is an

educational research, it cannot be separated from the student population, since both strata are the main protagonists of the educational environment, in this case, of higher education.

#### **1.4.2. Scope**

The teaching-learning processes in virtual environments have become the main alternative due to the impossibility of going to educational centers for face-to-face classes. The use of technology, through virtual environments, can be of great benefit to improve aspects of learning from different dimensions, taking into account that nowadays teaching-learning processes are not limited to time and space in specific enclosures, but on the contrary, these processes can be developed anywhere and at any time thanks to e-learning.

In the same way, it seeks to generate a space for reflection in all educational actors, especially in higher education, on the valuation of these technological resources, as tools of constant support in the educational processes, both inside and outside the classroom.

In summary, this research work aims to analyze in a precise and concise manner, the attitude that professors show regarding the use of e-learning in the teaching-learning processes that are being developed at the higher education level, in the different areas and subjects taught in the departments of the Franz Tamayo University.

## **CHAPTER II**

### **THEORETICAL FRAMEWORK**

#### **ANTECEDENTS**

Currently, due to the pandemic, virtual education has generated a radical change in students, this situation has facilitated self-learning activities, because in this new context, time, places and resources can be better managed, obviously, always taking into account the factor of good connectivity to the internet network.

Virtual education, represented in this case by e-learning, in the context of higher education, is a modality that encompasses a set of techniques and processes of study and academic research that is characterized by interactivity between students and their professors, their fellow students and multimedia materials made available to them through the internet network.

According to UNESCO (2018), virtual education is where the actors interact through numerical representations of the elements of the teaching-learning process, but they are in different places and moments of time. It is a modern educational paradigm with asynchronous and synchronous communication.

On the other hand, the accelerated development of technologies and digital instruction media and their application in virtual education worldwide, and therefore in the Plurinational State of Bolivia, have provided solutions to problems that in the past, not very far, could not be solved, however, at the same time, these have created other problems in different areas, which in some contexts have increased their limitations and needs.

After reviewing the most recent literature on virtual education in higher education, at The Mayor de San Andres University, it has been found that, in all cases, e-learning has simply been a complement to traditional face-to-face education that develops in all educational

fields. There have been no examples of the application of digital tools in a purely virtual environment. Such is the case of Aleyda Polo Soto (2016), who in her thesis refers to research the attitudes of professors toward the use of ICT in the teaching of English, as well as that to research professors ICT competence and frequency of use of information and communication technologies in the teaching of English at the Linguistics and Languages Department.

Some studies refer to educational platforms and their impact on the educational process; others promote the implementation of virtual courses as a form of support for face-to-face classes, implementing distance education for remote sectors aimed at people who for various reasons cannot attend educational centers. In this case it is possible to cite Franklin Apaza Romero (2016) who, in his thesis, proposes a collaborative platform model for the development of massive online courses, in the Computer Science department at The Mayor de San Andres University.

These works, among many others, are constituted as background to the proposal of completely virtual courses, since, today, e-learning has created new conditions for learning that are contributing to better quality education. The methodologies are adapted to the environment and the conditions with the help of audiovisual elements and materials that allow them to make more dynamic the activities.

## **THE IMPORTANCE OF THEORETICAL BASIS**

### **2.1. THE CONNECTIVIST APPROACH**

Today's society, known as the information society, is strongly rooted in constant technological advances, one of which is mobile telephony, represented by smartphones. Because of this situation arises the theory of connectivism, which tries to explain how human beings learn in a world highly influenced by information and communication technologies (ICT).

Because the cell phone can be connected to the internet (with its multiple possibilities), blogs, wikis and social networks, it becomes an important ally that allows expanding the network of connections cited in this theory in a ubiquitous and timeless way (Brazuelo & Gallego, 2012, p.20).

Thus, connectivism emerges as a new learning theory characterized mainly by the great influence of technology in the field of education.

According to Aparicio (2011) in Vázquez-Cano & Sevillano (2015):

In this second decade of the 21st century, the teaching-learning process is governed by the principles of connectivity. The concepts of democratic communication, participation, collaboration or empowerment have spread and try to move away from the transmission and linear paradigm that imposed the relationships between professors and students (p.39).

The theory of connectivism holds that learning is constituted by useful knowledge from different contexts and that it may be stored in devices, i.e., that knowledge may reside outside the human being, through artificial forms of information storage.

From this perspective, learning is considered "as a process of construction of nodes or sources of information in a collective construction of knowledge through these connections and which is constantly updated" (Brazuelo & Gallego, 2012, p.21).

On the other hand, connectivism defines learning as a continuous process that occurs in different scenarios, including communities of practice, personal networks and in the performance of tasks in the workplace. According to Siemens (2004) cited by Gutiérrez (2012), the principles of connectivism are defined as follows:

- Learning and knowledge are found in the diversity of opinions.
- Learning is a process of specialized connection of nodes or sources of information.
- Learning can reside in non-human artifacts.
- The capacity to know more is more important than what is currently known.



- Nurturing and maintaining connections is necessary to facilitate continuous learning.
- The ability to identify connections between subjects, ideas and concepts is essential.
- Decision making is a learning process in itself.
- Selecting what to learn and the meaning of incoming information is viewed through the lens of a changing reality.

"Although the use of technology does not explicitly imply new ways of learning, the provision of technological resources in classrooms implies a new pedagogical conception, which abandons rote learning and encourages feedback" (Cope & Kalantzis, 2009, mentioned by Vázquez-Cano & Sevillano, 2015, p.43).

On the other hand Siemens (2004) in Gutiérrez (2012) indicates:

Some traditional learning theories, such as Behaviorism, Cognitivism, and Constructivism, have limitations because these theories were developed at a time when technology had not impacted learning at the level it does today. In fact, these theories were developed when knowledge was growing more slowly. Today, however, knowledge is growing at a dramatically higher rate (p.114).

However, in order to better understand the pedagogical principles on which the educational field is based, it is not enough to focus simply on the theory of connectivism, but rather on its relationship with the pedagogical models that apply its foundations to the educational context, which have been mentioned in the previous section.

According to Naismith (2004) cited by Brazuelo & Gallego (2012):

There is no theoretical framework to explain the complexity of learning through mobile technologies that can guide its application in the educational field. However, it has been investigated about the possible relationships that can be established between some learning theories and the use of cell phones as a tool that

helps the learning process, taking into account aspects related to context, collaboration, social interaction or knowledge construction, among others (p.22).

## **2.2. TEACHING-LEARNING PROCESSES IN HIGHER EDUCATION**

At present, universities and higher education institutions have the unavoidable commitment, before society as a whole, to assume a leading role in the training of competent professionals in the different fields of knowledge, as well as to promote scientific research and technological innovation in order to contribute to the socio-economic development of the country.

In that understanding Cardona (2016) states:

It came to be understood that the university plays a preponderant role in the education and training of future professionals and social leaders, which calls for the search for strategies to improve pedagogical, didactic and evaluative processes, centered on the student (p.53).

Now, every institution linked to the educational field, especially the one that concerns the higher education level, within the framework of planning its teaching-learning processes, must take into account the different learning styles and the new ways of teaching to address the aforementioned processes. "Teaching becomes increasingly complex; learning becomes much more challenging experience for the learner" (Cardona, 2016, p.53).

If these two concepts are taken separately, it will be understood that, on the one hand, teaching is an activity that necessarily involves three elements: a teacher, one or more learners and an object of knowledge or study. On the other hand, this activity relates these elements in the way the teacher transmits this knowledge to the learners using various methods, techniques and resources. In this regard, Gómez & Polanía, (2008) mention "Unfortunately, in many classroom processes it has been assumed that in order to teach it is enough to repeat and the real knowledge that is only obtained through experience and dialogue is left aside" (p.24).

Therefore, any teaching process, to be considered as such, must necessarily produce meaningful and contextualized learning, and the use of different techniques and resources, as part of the professors' strategy to try to ensure that this learning is not only assimilated by a few, hence the importance of understanding learning styles.

According to Imbernon (2009), it is necessary to recall that:

What is important is not the different methodologies or teaching techniques as an end in itself, but the teacher's concern for student learning and how this is originated in the whole teaching process. It is thinking about what I am going to teach, how I am going to teach it and what I want my students to learn (p.6).

This author also mentions that the activity of teaching is not as simple as one might think. A university teacher who assumes the great importance of this task of teaching needs at least:

- To have a mastery of the subject or discipline to be taught. You cannot teach if you do not know what you have to teach.
- To have certain knowledge and skills to communicate with people. Communication will be the basis of teaching.
- To know the group of students. If we intend to tune in, the more we know the group, the better.
- To know and experiment group dynamics techniques with different purposes (presentation, encourage interaction, debate, collaborate, simulate).
- To know how to elaborate a script of the session, that is to say, to distribute the time according to the objectives to be pursued, the type of activities to be proposed, the fatigue curve of the students, etc.
- Have a system in place to evaluate both the students and your own intervention.

The second term linked to this process, namely learning, refers to a process by which learners acquire knowledge, skills and/or values, leading to new mental constructions,

which lead to permanent changes in their behavior, through teaching, experience or self-study.

In relation to the term used above, which refers to learning styles, this alludes to the fact that at the time of the learning process, each individual uses his or her own methods or strategies, so that these methods or strategies become his or her personal learning style. It will not be new to understand that, in a given educational context, not everyone learns the same, nor in the same way, nor at the same speed.

These learning styles are closely related to the multiple intelligences that each individual possesses. In this regard, Aleix Mercadé made a brief summary of the multiple intelligences proposed by Howard Gardner (1983), which are detailed below:

1. Linguistic intelligence. It is considered one of the most important. In general, both hemispheres of the brain are used and it is the one that characterizes writers. The extensive use of language has been an essential part for the development of this type of intelligence.
2. Musical intelligence. Also known as "good ear", it is the talent that great musicians, singers and dancers have. The strength of this intelligence lies from birth and varies equally from person to person. An important point in this type of intelligence is that no matter how strong it is, it needs to be stimulated to develop its full potential, whether it is to play an instrument or to listen to a melody with sensitivity.
3. Logical-mathematical intelligence. Those who belong to this group make use of the logical hemisphere of the brain and can devote themselves to the exact sciences. Of the various types of intelligence, this is the closest to the traditional concept of intelligence. In ancient cultures, this type of intelligence was used to formulate calendars, measure time and accurately estimate quantities and distances.
4. Spatial intelligence. This intelligence is possessed by people who can make a three-dimensional mental model of the world or extract a fragment of it. This

intelligence is possessed by professions as diverse as engineering, surgery, sculpture, marine, architecture, design and decoration. For example, some scientists used sketches and models to visualize and decode the spiral of a DNA molecule.

5. Body intelligence - kinesthetic. Kinesthetic people have the ability to use their body to solve problems or perform activities. Within this type of intelligence are athletes, surgeons and dancers. A natural aptitude for this type of intelligence is often manifested as a child.
6. Intrapersonal intelligence. This type of intelligence allows us to form an accurate image of ourselves; it allows us to understand our needs and characteristics, as well as our qualities and defects. And although it was said that our feelings should help guide our decision making, there should be a limit to their expression. This type of intelligence is functional for any subject of our life.
7. Interpersonal intelligence. This type of intelligence allows us to understand others. It is based on the ability to manage human relationships, empathize with people and recognize their motivations, reasons and emotions that move them. This intelligence alone is a fundamental complement to the previous ones, because it is also useless if we get the best grades, but we choose our friends and in the future our partner badly. Most of the activities that we perform daily depend on this type of intelligence, since they are formed by groups of people with whom we must relate. That is why it is indispensable for a leader to have this type of intelligence and also to make use of it.
8. Naturalistic-pictorial intelligence. This type of intelligence is used when observing and studying nature. Biologists are the ones who have developed it the most. The ability to study our surroundings is a way to stimulate this type of intelligence, always looking at the natural aspects with which we live. In this intelligence, Gardner also adds the pictorial qualities of the individual, because of its relation to his ability to observe, interpret and reproduce what the painter/sculptor/designer sees. This intelligence was added in 1995; therefore, previously people spoke of Gardner's 7 types of intelligence.

Understanding this teaching-learning process as an activity that opposes one to the other, a complementarity between both will be recognized, where there will be a communication process between a subject that can teach and another that can learn under certain procedures and contextual conditions.

However, to conclude this section, it should be noted that even though there is a very close relationship between teaching and learning, this relationship cannot always affirm that where there is teaching there is learning, which is why the development of evaluative activities and the results they yield will be fundamental to amend, improve or maintain, as the case may be, the entire teaching-learning process.

### **2.3. EDUCATION**

The concept of education is closely related to the concept of learning and this in turn with the acquisition of knowledge, skills and values. Education involves complex processes that extend throughout the life of the human being, beginning at a very early age in the same family, continuing in the different stages of his academic life, these processes have no end point so it is said that the human being never stops learning, therefore, undergoes constant changes in behavior and precepts throughout his existence.

According to Mialaret (1977) cited by Sarramona (1989):

In a broad sense, education is as old as man. Indeed, since his appearance, man has been concerned with raising and caring for his children until they could fend for themselves, and it is with this meaning that the term "education" arises (p.27).

In today's view, three general meanings can be applied to it:

To speak of education often implies referring to a social institution: the "educational system". Thus, one speaks of Western education, Spanish education, modern education, etc., giving it a historical-comparative or socio-political content.

The word "education" is also used to designate the result or product of an action. Thus one speaks of a "good" or "bad" education, of an education adapted or not to the demands of the times, of a conservative or progressive education, etc.

The third meaning refers to the "process" that relates in a foreseen and unforeseen way two or more human beings and places them in situations of exchange and reciprocal influences. It is in this third sense that it is often used when formulating a scientific theory of education.

The three interpretations are closely linked. The theoretical conceptions of the educational process find their generalized materialization in educational institutions, which achieve certain results according to how they are organized and how they conceive the educational process (Sarramona, 1989, p.28).

The concept of education is very diverse and has much to do with the personal reflection that each author makes regarding the meaning of education, some of them are cited below to make this concept a little clearer.

ARISTOTLE: "Education consists in directing the feelings of pleasure and pain toward the ethical order."

AZEVEDO: "Education is a process of transmission of the traditions or culture of a group, from one generation to another".

BITTENCOURT: "Process of progressive adaptation of individuals and social groups to the environment, by valorized learning, and which determines individually the formation of the personality, and socially the conservation and renewal of culture".

COPPERMANN: "Education is an action produced according to the demands of society, inspiring and modeling, with the purpose of forming individuals in accordance with its ideal of man himself".

DEWEY: "Education is the sum total of processes by which a community or a small or large social group transmits its acquired capacity and purposes in order to ensure the continuity of its own existence and development".

LEMUS: "The educational purpose is the formation of free men, conscious and responsible for themselves, capable of their own determination".

RUFINO BLANCO: "Education is the evolution, rationally conducted, of the specific faculties of man for his perfection and for the formation of character, preparing him for individual and social life, in order to achieve the greatest possible happiness".

ZILLER: "Education is the action on a man, intentional and ordered according to a plan, action which is directed at an individual man, as such, in his early youth, with a view to providing him, in accordance with what is planned, with a certain and permanent form".

From these different definitions it can be deduced that the educational activity is a purely human process and that it has the fundamental purpose of perfecting each and every one of its dimensions in an integral way. By perfecting is understood the modification of their behavior due to the acquisition of new knowledge and new skills with the intention of improving their natural evolution.

## **2.4. HIGHER EDUCATION**

Higher education is understood as the education subsystem that takes place after the secondary education stage. Higher education is considered to be the last phase of the entire academic training process through which all students who wish to obtain a professional degree must pass. This stage is generally provided by higher education institutions, institutes of higher education and/or universities, whether public or private.

The requirements to access this level, especially in the public sector, are to have obtained a bachelor's degree in humanities awarded by the Bolivian education system and to have passed the academic sufficiency test or the pre-faculty course, which can last between three to six months, depending on the faculty to which one applies.



Within the higher education subsystem, undergraduate and graduate studies can be carried out with different academic degree levels that can last between three or more years, depending on the academic degree to be obtained.

The main objective of this stage is the permanent formation and training of human resources, both in the humanistic and scientific fields, in order to provide society with qualified professionals in the fulfillment of their work activities, with a high degree of service vocation.

In the context of education in the Plurinational state of Bolivia, the higher education subsystem is subdivided into university and non-university. University education, on the other hand, is divided into four: Public and Autonomous Universities, State Public Universities, Private Universities and Special Regime Universities.

Autonomous public universities are those that are financed by the State and are autonomous. State public universities are those that are also financed by the State but do not have their own autonomy and their administration is presided over by the State. Private universities are those that are financed and administered by the private sector. Finally, special regime universities combine their financing and administration from public and private sources.

On the other hand, in general terms, both public and private universities have their own internal structure, most of them are organized and divided by faculties and these in turn by departments, in some cases, as in the case of the Public University of El Alto, there are no faculties and their division is constituted by subjects, which constitute an independent structure of administration and academic management.

The university system is regulated and regulated by Law 070 of Education "Avelino Siñani - Elizardo Pérez". However, in the document "Education in Bolivia: indicators, figures and results" published by the Ministry of Education (2004) it is mentioned that:

The Bolivian university system includes the Executive Committee of the Bolivian University (CEUB), made up of 12 universities (10 public universities, the

Bolivian Catholic University and the Military School of Engineering); 39 private universities; the Military University of the Armed Forces of the Nation under a special regime; and the Public University of El Alto, which is autonomous but with particular characteristics (p.119).

## **2.5. EDUCATIONAL MODELS**

Recognizing the social character of human activity, taking into account the role of social factors in the becoming and development of the human species, means recognizing collective work as a product as a transformer of itself; in accordance with Ortiz (2003):

A process that is not spontaneous, but consciously projected on the basis of previously determined objectives that has imposed on man, as the subject of the productive process, the need to seek various methods and procedures that guarantee the effectiveness of the productive process on the one hand and make it more efficient and less costly on the other (p.5).

Although a reflection is being made on the educational activity developed in the different higher education institutions and universities, this reflection has to take into account the different pedagogical models that are being implemented in the development of educational processes, understanding that these pedagogical models are theoretical constructs or pedagogical approaches that are intended to guide professors in their intention to develop curricula and/or systematize the teaching-learning processes. In other words, they are conceptual patterns that make it possible to clearly and concretely schematize the parts and elements of any pedagogical practice.

According to DeZubiría (2006), quoted by Vives (2016) "pedagogical models provide basic guidelines on the ways of organizing educational purposes and defining, sequencing and hierarchizing contents; they specify the relationships between students, knowledge and professors and determine the way in which evaluation is conceived" (p.41).

Since there is a diversity of theories and approaches to the subject of this section, it is necessary to know certain fundamental characteristics in order to recognize a given pedagogical model, which, according to Porlán (1983) mentioned by Gómez & Polanía (2008, p.41), arise from answering three essential questions about its ultimate aims:

- What to teach? That is, what content, in what sequences and in what order, its teachability and relevance.
- How to teach? This refers to methods, means and resources. Here the teaching styles of the professors and the learning styles of the students acquire a relevant value.
- What and how to evaluate? This refers not only to the moments, but also to the instruments of verification and the contents foreseen from the beginning of the process. In this aspect, teaching and learning styles also acquire importance.

However, at the moment of proposing or developing a certain pedagogical model, the fundamental purpose of the educational activity must be taken into account; so many other questions must be answered beforehand. According to Vives (2016, p.43) these questions would be:

- With what purpose or ends does the educational process take place?
- Who are the subjects of the educational act? What is the role of the teacher? What is the role of the student? What is the relationship between professors and students?
- What is the knowledge to be taught and learned?
- How is knowledge presented, interacted with and accessed?
- What are the different forms or styles of learning?
- When is knowledge approached?
- How is learning evaluated or assessed?
- What human, physical and material resources are used to support the educational process?

Consequently, pedagogical models must respond to each of these questions in order to define educational actions based on an educational theory, from which to determine the purposes and goals, the thematic axes and contents, methodologies, strategies, resources and finally evaluation, which must be taken into account in every teaching-learning process.

## **2.6. TECHNOLOGY AND EDUCATION**

As was to be expected, the vertiginous and continuous technological development, with its characteristics of interactivity and connectivity, has changed the way in which university professors and students relate to each other through the use of ICTs, both inside and outside educational institutions.

In this new context, the main protagonists of the educational act, the students, considered as digital natives, because they are part of a generation that was born and grew up together with the development of new technologies, specifically, the progress of mobile telephony, internet service and smartphones, require that the curricular contents are approached from more meaningful perspectives for them, which generate greater interest, motivation, and in turn, stimulate the development of their critical and reflective thinking.

The term digital native was coined by the American writer Marc Prensky, who believes that professors should teach how to live in the future, and students should actively participate in their own learning processes.

Analyzing the opinion of this author, with respect to the vision of the future, the current scenario is somewhat discouraging, since in many cases it can be said that we are trying to introduce 21st century technologies in educational systems that have changed little or almost nothing from the 20th century, in addition to this, the scarce and not very relevant training of professors in terms of educational policies that support the use of technology in the teaching-learning processes is evident.

With reference to the above, Machado (2016) refers to two very clear issues:

The first is that ICTs have brought about great social transformations and are opening up numerous possibilities in the field of education, and the second is that there is no educational policy or theoretical reflection to support their use and enable the integration and development of their potential in a cross-cutting manner, as they are currently relegated to specific, one-off initiatives (p.240).

On the other hand, in relation to the two characteristics mentioned at the beginning, related to ICT environments, interactivity and connectivity, Coll (2004), mentions:

The combination of these features opens unsuspected horizons to the possibility of configuring virtual communities of people oriented towards the performance of specific tasks in the most diverse fields of human activity (commerce, work, research, education, leisure, etc.) or the achievement of specific objectives. Consequently, following the opinion of the aforementioned author, from the educational point of view, the confluence of both characteristics, interactivity and connectivity, has important potential repercussions for the planning and development of teaching and learning processes in ICT-based environments (p.12).

On the other hand, in opinion of López de la Madrid (2007):

The use of Information and Communication Technologies (ICT) in the world's universities has been one of the main factors in inducing change and adaptation to the new ways of doing and thinking that began in the 1980s in the different sectors of society. In the administrative field, the action processes generated facilitate the organization of institutions, making it possible to handle large amounts of information and databases in the different processes. In the academic field, these tools have facilitated access to information for a large number of students, and have significantly modified the teaching-learning process (p.66).

Likewise, according to Gabelas (2002):

The digital revolution implies breaking the three units of the traditional school: the unit of space, represented in the classroom, the unit of time, determined in the curricular programs, and the unit of content, centered on the subjects or subjects. It also implies, on the other hand, a change in the mentality and role of the educator. From teacher, transmitter to facilitator, to mediator of learning processes, with a capacity, ability and aptitude to transform information into knowledge (p.87).

In this new scenario, it will be important to monitor the ways in which these new technologies are used, because if they are only being used as simple tools for the transmission of information, they would not be making the significant contribution or playing the leading role necessary to create learning environments that offer students a diversity of experiences for the production of new knowledge.

It is a common mistake to think that only the mere introduction of ICT in the educational environment can act by itself and can generate changes, it is necessary much more than that, it is necessary to propose substantial changes in the academic and administrative structures of universities or higher education institutions to achieve the desired objectives.

It will also be important to note in this part of the theoretical framework, that due to these technological advances, the boundaries between formal education, which is intentional, planned and what it is known as compulsory education; non-formal education, which is also intentional and planned but not compulsory, but rather optional and flexible; and informal education, which is obtained unintentionally, in different daily activities such as at home, at work or with friends, are no longer very evident.

This situation of integration of these learning modalities is generating new scenarios in the future of education. According to Coll (2004):

The development experienced by ICTs during the second half of the 20th century, as well as the emergence and progressive generalization of the new economic, social and cultural order facilitated, to a large extent, by these technologies, are contributing to transform educational approaches, scenarios and practices.

According to this author, ICTs are transforming traditional educational scenarios, while at the same time making new ones appear (p.3).

However, in order for these transformations to take place effectively, it is necessary to develop certain conditions that, according to López de la Madrid (2007), are necessary competencies to adapt effectively to constant change:

1. Self-managed learning that allows learners to access and assimilate information both inside and outside the classroom,
2. "Just in time" learning, i.e., when and where it is needed,
3. The ability to solve the problems that technological modifications and developments generate, and
4. The ability to access, discriminate, evaluate and assimilate the information needed to transform it into useful and necessary knowledge.

In terms of formal university education, which is what concerns us, it is essential to take this new reality into account, in order to improve processes and provide opportunities for students to use these technologies to build knowledge and develop skills and abilities to face future challenges.

Corroborating this, Perrenoud (2004) mentioned by López de la Madrid (2007), refers:

To train in new technologies is to train opinion, critical sense, hypothetical and deductive thinking, powers of observation and research, imagination, the ability to memorize and classify, reading and analysis of texts and images, representation of networks, challenges and communication strategies (p.109).

## DEFINITION OF CONCEPTS

### 2.7. E-LEARNING

As previously mentioned, the evolution of distance education, as a result of the implementation of e-learning and the contributions of computer specialists to the field of education, poses a great challenge to educational institutions at all educational levels, such as how to integrate these technologies in their planning and, especially, in their teaching-learning processes. From the simple occasional use of virtual learning spaces to reinforce face-to-face academic activities to the use of virtual environments for fully online courses according to different educational models, the incorporation of e-learning into these processes is being carried out from very different perspectives, although with a common denominator of distance education.

The discussion of the definition and practices of e-learning focuses on the intersection of education, teaching, and learning with ICT (Friesen, 2009). It is undoubtedly preceded by two other disciplines: educational technology and distance education. Both have significantly contributed to the intensive use of ICT for educational purposes, but neither can be strictly equated with e-learning.

E-learning could be considered as a natural evolution of distance learning, which has constantly taken advantage of the latest tools that have emerged in the technological field to structure education. According to some authors, e-learning is a new generation of distance education however, as mentioned by Garrison & Anderson (2003) “E-learning does not represent more of the same; it is about doing things differently” (p.7).

For the purposes of this research work, it will be necessary to establish an agreement on how to define e-learning, in an attempt to identify models and educational practices to apply e-learning and to determine specific situations for a better and more effective use of this type of teaching-learning: “There is a pressing requirement to understand better the nature of e-learning, as an educational innovation, and to evolve contextually derived



frameworks for change which align with organizational culture and practice” (Rossiter, 2007, p.93).

Moreover, Renold & Barter (2003) stated, “an inclusive definition is a broader definition that encompasses a wider spectrum of the concept and can cope with the complexity of its representation/characteristics” (p.91).

### **2.7.1. Advantages and disadvantages of e-learning**

According to the “e-learningindustry” online magazine, in an article by Priyanka Gautam who establishes that, as with most teaching methods, virtual learning scenarios also have their own positive and negative aspects. Understanding all these positives and negatives will help universities create strategies to deliver classes more efficiently, ensuring more meaningful learning for students.

#### Advantages

1. **Efficiency.** Online learning offers professors an efficient way to deliver lessons to students. Online learning has a number of tools such as videos, PDFs, podcasts, and professors can use all these tools as part of their lesson plans. By extending the lesson plan beyond traditional textbooks to include online resources, professors are able to become more efficient educators.
2. **Accessibility of time and place.** Another advantage of online education is that it allows students to attend classes from any location of their choice. It also allows schools to reach out to a more extensive network of students, instead of being restricted by geographical boundaries. Additionally, online lectures can be recorded, archived, and shared for future reference. This allows students to access the learning material at a time of their comfort.
3. **Affordability.** Another advantage of online learning is reduced financial costs. Online education is far more affordable as compared to physical learning. This is because online learning eliminates the cost points of student transportation,

student meals, and most importantly, real estate. Additionally, all the course or study materials are available online, thus creating a paperless learning environment which is more affordable, while also being beneficial to the environment.

**4. Improved student attendance.** Since online classes can be taken from home or location of choice, there are fewer chances of students missing out on lessons.

**5. Suits a variety of learning styles.** Every student has a different learning journey and a different learning style. Some students are visual learners, while some students prefer to learn through audio. Similarly, some students thrive in the classroom, and other students are solo learners who get distracted by large groups.

#### Disadvantages

**1. Inability to focus on screens.** For many students, one of the biggest challenges of online learning is the struggle with focusing on the screen for long periods of time. With online learning, there is also a greater chance for students to be easily distracted by social media or other sites. Therefore, it is imperative for the professors to keep their online classes crisp, engaging, and interactive to help students stay focused on the lesson.

**2. Technology issues.** Another key challenge of online classes is internet connectivity. While internet penetration has grown in leaps and bounds over the past few years, in smaller cities and towns, a consistent connection with decent speed is a problem. Without a consistent internet connection for students or professors, there can be a lack of continuity in learning for the child. This is detrimental to the education process.

**3. Sense of isolation.** Students can learn a lot from being in the company of their peers. However, in an online class, there are minimal physical interactions between students and professors. This often results in a sense of isolation for the

students. In this situation, it is imperative that the school allow for other forms of communication between the students, peers, and professors. This can include online messages, emails and video conferencing that will allow for face-to-face interaction and reduce the sense of isolation.

4. **Teacher training.** Online learning requires professors to have a basic understanding of using digital forms of learning. However, this is not the case always. Very often, professors have a very basic understanding of technology. Sometimes, they don't even have the necessary resources and tools to conduct online classes.

5. **Manage screen time.** Many parents are concerned about the health hazards of having their children spend so many hours staring at a screen. This increase in screen time is one of the biggest concerns and disadvantages of online learning. Sometimes students also develop bad posture and other physical problems due to staying hunched in front of a screen.

## **2.8. DEFINITION OF ATTITUDES**

Attitudes, in general, are important because they significantly influence the social thinking of human beings even if they are not reflected in their behavior, this change in attitudes can be affected by various agents. Moreover, they represent a basic aspect of their social cognition in their evaluation of the world around them. Consequently, attitudes function as mental models, as a disposition to react favorably or unfavorably to an object, situation or event with which one is in contact, together with the personality, motivation and expectations of each person.

According to Herdina & Jessner (2002) "attitudes, like the rest of affective variables and like the learning process itself, are never static, but vary and can be altered or modified over time, influenced by people, experiences and contexts".

For the purposes of the development of this work, the most significant contributions on the study of attitudes have been reviewed; the theoretical orientations that direct this research are mainly focused on attitudes towards the use of e-learning by professors. Also, the concepts of attitude will be defined from the point of view of authors and experts on the subject.

Most of the definitions of attitudes found in the literature can be grouped into three categories: affective component, which refers to the feelings one has towards people, things or situations; behavioral component, which refers to the actions or behaviors one has towards people, things or situations; and cognitive component, which refers to the thoughts one has towards people, things or situations.

As already mentioned, attitude is a subject of study that has been debated by various theorists and defined under a great variety of concepts. That is why Whittaker (1979) made a compilation of these concepts. In this sense, Berkowitz quoted by Whittaker, (1979) proposes to divide them into categories based on three basic characteristics:

1. As proposed by Thurstone and Osgood, who consider attitude as an evaluation or an affective reaction. Attitude is measured by taking into account whether an individual's feelings towards an object are favorable or unfavorable.
2. Other authors consider that the main characteristic of an attitude is the disposition to act in a certain way.
3. A third group of researchers proposes that attitude is a mixture of three components: affective, cognitive and behavioral.

It is precisely these three components proposed by this third group that will be used as the theoretical basis for the study.

On the other hand, Campbell also quoted by Whittaker, (1979) proposes to classify the different definitions of attitude into two categories:

1. Behaviorist, who coincides with the point of view of McGuinnis, who shows that attitude is a kind of behavior subject to the control of a single social variable, called attitude referent.
2. Quasi-phenomenological, which considers attitude as cognition with three fundamental components: affective, behavioral and cognitive.

Although there is a great diversity of attitude concepts, some common elements stand out in all of them. Therefore, for the purposes of this research, it has been considered those elements that in one way or another are included in all the aforementioned concepts, which are:

- a. Attitudes express some degree of approval or disapproval, liking or disliking, approaching or distancing towards the object of the attitude, in this case, the attitude towards the use of e-learning.
- b. They carry a great affective charge towards their students.
- c. They imply the predisposition of the student towards a certain topic, subject, event or idea.
- d. They have multiple dimensions, since they include a wide spectrum of responses of an affective, cognitive and behavioral nature.

## **2.9. ATTITUDE MODELS**

In spite of the diversity of existing concepts on attitude, only three models stand out as the most important to study them, according to Sanchez & Mesa (1997) they are:

### **2.9.1. Unidimensional model**

It consists of emphasizing the evaluative component of attitude, using the term to refer to a general feeling, permanently positive or negative, towards some person, object or problem within this model it is important to differentiate the concept of attitude from the concept of belief and behavioral intention. Thus, attitude represents the emotions related to the attitude object its positive or negative evaluation. Behavioral intention refers to the

disposition to behave in some way with respect to the attitude object. This disposition to behave does not necessarily imply that the behavior will in fact be performed.

### **2.9.2. Expectation-Value model**

It was developed by Fishbein who describes that there is a relationship between attitude and behavior. A person's attitude towards an attitude object is a function of the value of the attributes associated with the object. The subjective probability that the attitude object is characterized by those attributes. Thus, an attitude is predicted by multiplying the value and expectation components associated with each attribute, and summing these products.

### **2.9.3. Multidimensional or three component model**

The study by Beckler cited by Morales, (1994) shows that attitude is understood as "a predisposition to respond to some kind of stimuli with a certain kind of response", which means that the responses that the person emits to the object of the attitude are susceptible to a triple classification, according to the predominance of the elements of information, beliefs, opinions and knowledge. The aforementioned author maintains that there is a three-component model: cognitive, affective and behavioral in every attitude and these are related to each other.

Cognitive component, according to Salazar, Montero, Muñoz, Santoro, Sánchez & Villegas, (1980) "it is necessary that there is also some cognitive representation of that object". In the case of the present study, when professors are asked about if they know e-learning principles and, how to use or apply them in their teaching activities, it is likely to obtain a response that indicates the knowledge they have about the object of study mentioned above, perhaps because they have a structured cognitive representation of the subject, which allows them to express an affection for or against the object in question.

The previous component is constituted by beliefs, knowledge, opinions, feelings and others, related to the object of attitude. Therefore, when a person has a vague

or erroneous representation of the attitude object, this will directly influence the perception of this object and consequently his attitude.

Affective component, this component has been considered by some authors, like Whittaker, (1979) as the fundamental component of attitudes, since through it the individual manifests feelings of acceptance, liking, rejection or anxiety towards the attitude object. This component defines the feeling in favor or against a certain social object, (Fishbein & Raven in Morales, 1994), it can be said that when an object is known, it is possible that feelings of liking or disliking are associated with such knowledge, especially if the referents are of some importance (interest, value for the object). In the case of the present study, it is possible that the emotions associated with the object of attitude are manifested according to the pleasant or unpleasant experiences that the professors have had in the use of e-learning.

Conative or behavioral component, the behavioral component of an attitude that according to Whittaker (1979) includes the act or behavior that an individual will manifest in the presence of the attitude object; thus the combination of these two components gives rise to the behavioral manifestations. In the case of this research, professors are forced to use e-learning resources in their teaching and learning processes, like classroom management and video conferencing platforms, so they must show a certain attitude in their behavior towards it.

## **CHAPTER III**

### **3.1. METHODOLOGICAL FRAMEWORK**

For the development of this research, the application of the scientific method is considered, which systematically takes into account the problem to be solved, the objectives to be achieved, the type of research, the sources of information, the techniques and instruments for data collection, the procedure and techniques for information analysis, in order to obtain validity and reliability in the results to be obtained throughout the process of study and analysis of this scientific research.

#### **3.1.1. Type of research**

In the process of the research on professors' attitudes regarding the use of e-learning in teaching-learning processes in pandemic times, the descriptive methodology was developed. This research has used a descriptive type. A descriptive type makes possible to fully understand the variables. As mentioned by Hernandez Sampieri (2014) "the descriptive study type seeks to specify important properties and characteristics of any phenomenon that is analyzed, it describes trends in a group or population" (p.92).

It was considered necessary to use this methodological design because, although the use of resources associated with e-learning are not new in the educational field, the fact of not being able to conduct face-to-face classes due to the restrictions caused by this pandemic, has led to classes being entirely virtual, something that was not expected and perhaps there was not enough preparation to face this situation. Consequently, the current situation is a new scenario for all educational actors, which needs to be analyzed.

#### **3.1.2. Research design**

To achieve a better understanding of this research and due to the fact that existing situations not intentionally provoked in the research, it is developed a non-experimental research. According to Hernandez et al., (2014) "in this type of research, it is not possible



to manipulate the actions, there is no direct control over phenomena nor can one influence them, this because they have already happened, as well as their effects” (p.124).

In addition, this study used a cross-sectional design in which the investigator measures the outcome and the exposures in the study participants at the same time. The participants are just selected based on the inclusion and exclusion criteria set for the study. Once the participants have been selected for the study, the investigator follows the study to assess the exposure and the outcomes.

On the other hand, this type of design is used for population-based surveys and it can be conducted relatively faster and are inexpensive. Also, this type of design gave the necessary information about the prevalence of outcomes or exposures. This information was useful for designing the study.

### **3.1.3. Methodological design**

This study has begun from the hypothesis **“The professors of Franz Tamayo University show a favorable attitude regarding the use of e-learning in the teaching-learning processes in pandemic times”**. It should be noted that the problem analyzed includes the relationships between the variables. In order to find criteria in favor or against this assertion, some instruments and a clearly defined action plan are also applied. The data are collected by various means following a strict procedure and have been prepared for qualitative and quantitative analysis, in the case of the statistical data supporting the interviews conducted.

### **3.1.4. Population and sample**

As already mentioned in a previous subtitle, this research analyzed the attitudes shown by professors of the Franz Tamayo University, in the academic unit of the city of El Alto, which is considered as the total population of the study. According to the report collected from the University's Teaching Staff Department, this academic unit has 198 professors in its 12 departments; the detail is summarized in the following table.

TOTAL	WOMEN	MEN	PROFESSIONS
198	86	112	Business Administrators Hotel Administrators Biochemists and Pharmacologists Public Accountants Commercial Engineers Lawyers Graphic Designers Nurses Doctors Dentists Systems Engineers Psychologists

Furthermore, the sample that was taken as the object of study was carried out by means of the simple random probability sampling technique, taking into account the size of the population.

The academic unit of the city of El Alto of the Universidad Franz Tamayo has a population of 198 professors, 86 women and 112 men of different ages, who teach in 12 undergraduate courses.

Taking into account the total number of professors working in this academic unit, a total of 152 surveys were carried out, which is the significant sample of a population of 198 professors, with a confidence level of 95% and a margin of error of 5%.

Additionally, as for the individual interviews, 10 interviews were conducted with different professors, of which 6 were recorded because 4 of them did not allow the recording of the interview and requested that their identities be kept confidential.

With regard to the student surveys, according to the information obtained from the kardex department of this academic unit, a total of 3820 students are enrolled. As a result, a total of 342 surveys were carried out, which is the significant sample of a population of 3820 students, with a confidence level of 95% and a margin of error of 5%.

The probabilistic samples that were taken as the object of study, fundamentally for the descriptive analysis, was carried out by means of the simple random probability sampling technique, taking into account the size of the population, the margin of error and the confidence level, with the help of the formula described below. It is worth mentioning that the population studied is characterized by being quite heterogeneous and diverse, both in terms of gender and age.

$$n = \frac{N \times Z_a^2 \times p \times q}{d^2 \times (N - 1) + Z_a^2 \times p \times q}$$

n = sample size

N = population size

Z = critical Z value, calculated from the normal curve area tables. Also called confidence level

d = absolute precision level. Referred to the amplitude of the desired confidence interval in the determination of the average value of the variable under study

$p$  = approximate proportion of the phenomenon under study in the reference population

$q$  = proportion of the reference population that does not present the phenomenon under study

In order to speed up and summarize the part of the mathematical calculations necessary to make the sample total meaningful, it is suggested to consult the websites "en.surveymonkey.com", "netquest.com" or "questionpro.com", which offer a simple and free online sampling calculation service in just a couple of seconds.

### **3.1.5. Technique and instruments**

#### ***3.1.5.1. Technique***

For the purposes of this research, a structured interview is used. The aim of this interview was to identify participant's emotions, feelings, and opinions regarding a particular research subject. The structured interview was designed to reduce the impact of different unbalanced factors on interview ratings by limiting "the degree of discretion that an interviewer is allowed in conducting the interview" (Huffcut & Arthur, 1994, p.186).

The objective of this research is to analyze the professors' attitudes regarding the use of e-learning in their daily activities because of the pandemic, for this reason the questionnaire focuses on the 3th component of the Levashina's structured components.

#### ***3.1.5.2. Research instruments***

Questionnaires are frequently used in quantitative research and in social research. A questionnaire is a series of questions asked to individuals to obtain statistically useful information about a given topic. When properly constructed and responsibly administered, questionnaires become a vital instrument by which statements can be made about specific groups or people or entire populations. They are a valuable method of collecting a wide range of information from a large number of individuals, often referred to as respondents. Adequate questionnaire construction is critical to the success of a survey.

Appropriate questions, correct ordering of questions, correct scaling, or good questionnaire format can make the survey worthwhile, as it may accurately reflect the

views and opinions of the participants. A useful method for checking a questionnaire and making sure it is accurately capturing the intended information is to pretest among a smaller subset of target respondents.

### **3.1.6. Determination of the research variable**

**Variable:** Professor's attitudes

### **3.1.7. Conceptualization of the variable**

#### ***3.1.7.1. Attitude***

Eagly & Chaiken (1993) define an attitude as “a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor”. Inherent in this definition is the idea that reporting an attitude involves the expression of an evaluative judgment about a stimulus object. In other words, reporting an attitude involves making a decision concerning likes vs. dislike; approving vs. disapproving; or in favor vs. against a particular issue, object or person.

An attitude, when conceptualized as an evaluative judgment, can vary in two important ways. First, attitudes can differ in valence, or direction. Some attitudes that a person possesses are positive (like our attitudes towards to return to face-to-face classes), others are negative (like our attitudes towards to use mobile phones in class), and yet others are neutral (like our attitudes towards to use laptops in class). Second, attitudes can differ in strength. For example, while one person might feel very strongly about the new scholar system, a second person might feel much less strongly about the same topic.

### 3.1.8. Operationalization of the variable

Professors' attitudes toward the use of e-learning in teaching-learning processes

VARIABLE	CONCEPT	DIMENSIONS	INDICATORS	TECHNIQUES	INSTRUMENTS
Professors' attitudes	Attitude is an individual's characteristic way of responding consistently in a favorable or unfavorable manner to objects, people, or events in his environment.	Affective	Professors' emotional responses in relation to the use of e-learning in teaching-learning processes	Surveys	Pre-structured questionnaire sheets
		Cognitive	Professors' beliefs and perceptions about the use of e-learning in teaching-learning processes		Pre-structured online questionnaires
		Behavioral	Professors' predisposition or tendency to use e-learning in teaching-learning processes	Interviews	Recorded semi-structured interviews

According to the table above, which specifies the indicators that helped to measure the operationalized variable, and because a previous review of the literature and the analysis of the studies that were previously carried out in relation to the research topic, it was proceeded to develop the instruments that would allow the objectives of the study to be fulfilled. It is worth mentioning that questionnaires are specific instruments that helped to

measure and analyze quantitative data. In this sense, two questionnaires were developed, one for professors and the other for students. These questionnaires take into account the 3 behavioral dimensions to be measured, feelings (affective dimension), knowledge (cognitive dimension) and application (behavioral dimension).

The instruments consist of 15 items in the case of the questionnaire for professors and 10 items in the case of the questionnaire for students, both of which can be found in the annexes:

Questionnaire for professors:

- 1.- What department are you teaching?
- 2.- Do you consider that the use of e-learning (virtual spaces through which teaching-learning processes are developed through the use of electronic media) increases student motivation to learn the contents programmed in your subject?
- 3.- Are you comfortable with your role as a tutor when administering courses virtually?
- 4.- Do you believe that the use of virtual tools, whether as a means of communication, administration, evaluation or interaction, saves time and effort in teaching?
- 5.- Do you consider that the incorporation of e-learning in the teaching-learning process tends to displace the work of the professor?
- 6.- How confident are you in the use of e-learning as a means for the development of teaching-learning processes?
- 7.- Are you comfortable teaching via camera, whether computer, tablet or cell phone?
- 8.- Do you consider that in virtual classes there is more interaction between the professor and the student than in face-to-face classes?
- 9.- Do you consider that the use of e-learning in the development of teaching-learning processes is not very beneficial?

10.- How motivated are you to learn more about e-learning?

11.- How many training courses have you taken to be able to develop the teaching-learning processes?

12.- Would you be predisposed to continue training in the use of virtual tools from now on?

13.- How many virtual resources do you use when developing the teaching-learning processes?

14.- How do you most frequently use virtual tools in the training process? (you can select more than one)

15.- Do you intend to continue using classroom management tools: Classroom, Moodle, Schoology or other, when returning to face-to-face classes?

Questionnaire for students:

1.- Do you consider that the use of e-learning (virtual spaces through which teaching-learning processes are developed through the use of electronic media) increases your motivation to learn?

2.- Do you notice that your professor is comfortable administering courses virtually?

3.- Do you think that the use of virtual tools, whether as a means of communication, administration, evaluation or interaction, saves time and effort in teaching processes?

4.- Do you think that the incorporation of e-learning in the teaching-learning process tends to displace the work of the professor?

5.- How much confidence do you perceive your professor has in the use of e-learning as a means for the development of teaching-learning processes?

6.- Do you feel comfortable with your professor passing classes through a camera, whether it's a computer, tablet or cell phone?



7.- Do you consider that in virtual classes there is more interaction between the professor and the student than in face-to-face classes?

8.- How qualified do you perceive your professor is when developing virtual classes?

9.- Do you consider that the use of e-learning in the development of teaching-learning processes is not very beneficial?

10.- How motivated do you see your professor to implement technological tools and resources in their virtual classes?

Item 1 of the questionnaire for professors confirms the participation of professors from all university departments.

Items 3, 5, 6, 7 and 10 of the questionnaire for professors and items 2, 4, 5, 6 and 10 of the questionnaire for students correspond to the affective component.

Items 2, 4, 8 and 9 of the questionnaire for professors and items 1, 3, 7, 8 and 9 of the questionnaire for students correspond to the cognitive component.

Items 11, 12, 13, 14 and 15 of the questionnaire for professors correspond to the behavioral component.

This operation was carried out with the cooperation of university professors with years of experience and who are currently working in different universities, who agreed to collaborate disinterestedly with this part of the study. The purpose of the validation of the instrument was to verify whether the statements of the questionnaire had all the indicators of the variable to be measured and that these, in turn, are in accordance with the fulfillment of the objectives set out in the research.

This first filter helped correct some of the observations made on the instruments. Once the observations were taken into account and corrected, the instruments were sent back for a second, more detailed review, both to the professors who made the first review and to the tutor herself. Taking into account that the instruments still had some observations, they were corrected in order to obtain greater reliability and trustworthiness in the instruments.

A pilot test was then carried out with some professors and students from another university to confirm that the instructions and statements of the questionnaires were clearly expressed and unambiguous. It should be noted that the questionnaires were distributed digitally through Google online questionnaires. This second filter helped to make corrections of form rather than substance. This operation was carried out three times until the results of the application showed no further observations. Once all the observations had been corrected, we now had reliable instruments that would help us to meet the objectives set out in the research. It should be clarified that reliability is the degree to which an instrument produces consistent and coherent results, that is, that its repeated application to the same subject produces the same results.

It is important to mention that everything mentioned above was done using the virtual resources available on the Internet due to the confinement and restrictions that still existed due to the pandemic, so the times that had been considered in the research schedule had to undergo certain adjustments due to the delay in the delivery of the requested information to the people who collaborated with this part of the study.

## **CHAPTER IV**

### **ANALYSIS AND INTERPRETATION OF DATA**

#### **4.1. ANALYSIS OF RESULTS**

##### **4.1.1. Analysis of individual interviews**

As for the individual interviews, ten professors from different departments of the Franz Tamayo University, in the academic unit of the city of El Alto, agreed to be interviewed, six of which could be recorded and four of which requested to keep confidential and only written notes were taken.

In general, all professors agree that both they and the students themselves were not prepared to face this situation, in the manner and magnitude that it was presented due to the COVID 19 pandemic. Fortunately, the institution where they perform their academic work had already given them some training courses on the management of technologies for educational purposes; on the other hand, some did it in a private and self-taught way, which facilitated their work at the beginning. However, it was the constant training courses given at the university itself, which made each professor show greater confidence in virtual classes.

In this regard, according to Professor Soledad Callisaya, "the pandemic came with new challenges for professors and for education as a whole, challenges that professors must overcome in order to adapt to the changes". It is also noted that, along with the professors, the students also received indirect training while the contents of each subject were being developed; consequently, both professors and students learned to interact in a purely virtual environment. On the other hand, in the opinion of some professors, it is very likely that the students did not feel an abrupt change since they are part of the generation that has grown up with technology.

Among other aspects, it should be noted that the advances and use of e-learning, represented by virtual environments, or virtual classrooms, bring with them a considerable number of advantages, but they also present certain inconveniences and difficulties, to which much attention should be paid and prompt solutions should be found, It is understood that the use of e-learning in a purely virtual context requires a good technological infrastructure, which not only refers to the appropriate and necessary devices or equipment, but also to the good quality of the Internet service that must be available in order to be able to carry out a class with total normality in this type of environment.

Nine of the ten professors interviewed mentioned that they currently feel very comfortable teaching virtual classes and that, even when classes are regularized in the near future, they will continue to use the resources and tools provided by e-learning. This situation is corroborated by Professor Vanessa Choque, who believes that "virtual education is here to stay".

The ways and times in which these resources are used vary from professor to professor, however, many agree that gamification is one of the most relevant ways because it has been the most accepted by students. Professor Monica Ichuta states that "gamification should be implemented to create motivating environments and generate greater expectation in students". In this sense, this way of developing content helps to generate significant learning in students.

The second most commented form of use of virtual tools and resources is evaluation, since the different tools facilitate the evaluation processes of the contents taught during the semester. According to Professor Graciela Choque "the technological tools facilitate quantitative evaluation", this statement is shared by other professors because the results are generated automatically and instantaneously. This situation is corroborated by the students who see in this type of virtual evaluation a faster return that helps them to identify their shortcomings in a timely manner.

Moreover, according to some professors, interaction with students was difficult at the beginning, because this purely virtual environment was not very common and perhaps even strange for some of them, however, with the passage of time it improved substantially to the point that it facilitated communication and participation of those students who were not very participative in face-to-face classes, something that stimulates the same professors to continue using e-learning to motivate students who are shy and introverted.

In another point, it is mentioned that, because at this stage of higher education it is essential to leave aside the traditional lectures, whether face-to-face or virtual and create new ways to manage a classroom with the help of technological resources and tools, so that, in the opinion of many professors, the resources and tools provided by e-learning, should be used in the various stages of administration, management, communication, creation and evaluation of the programs and content proposed in each subject for the proper development of the teaching-learning processes.

Likewise, some professors highlight the fact that students are nowadays totally familiar with the use of social networks, Facebook and Whatsapp among others, so it is thought that this situation should be productively exploited as a support to virtual classes, with the understanding that learning is a social enterprise, and social networks offer precisely that, a dynamic and permanent communication among peers.

It should be noted, in this part of the analysis of the information collected in the personal interviews, that all professors who have kindly collaborated with this research, have created in their classes, along with their students, Whatsapp groups, through which they share information of different kinds, and at the same time ensure that no student can justify not knowing about any assignment or work that has been done. Thus, the use of social networks at the educational level is evidenced.

In addition, all the interviewed professors agree on the fact that, from the beginning, "rules" should be established to facilitate the normal development of the classes, such as having the cameras on, in order to facilitate class control. Although it is recognized that it is very difficult to require everyone to have the cameras on, due to various factors, an

attempt should be made to establish agreements between professors and students for the normal development of the processes and thus avoid distractions or other factors that may hinder the students' learning.

In some cases, e-learning has become an ally of the professor in the sense that it is now much easier to share multimedia material, photographs, audio and video, through the Internet, without the cumbersome problem of using texts and all the physical material that became an economic expense for the students. This fact is also a significant fact in opinion of the students, however, they also express that in spite of no longer generating an economic expense in the purchase of material, this expense is now made in the purchase of internet packages to be able to surf the net.

In this regard, it is noted that, thanks to the virtual tools provided by e-learning, it is much faster and easier to share bibliography or extra material to support the contents programmed for each subject, such as documents in PDF format, videos and photographs. It also highlights the use of applications that support the performance of certain tasks, such as programs specially developed to teach virtual classes and audio and video editors, among many others.

With the use of e-learning, the barriers of space and time in education have been broken down. Some professors believe that synchronous and asynchronous communication between professors and students outside the classroom, permanent access to the Internet and the interactivity that these phenomena generate, have come to provide students with certain autonomy when acquiring new knowledge. By the way, Professor Mauricio Conde mentions "virtual classrooms are generating greater participation and initiative in students, developing in them autonomy and self-learning".

On the other hand, the same professors mention that, given the enormous amount of information, which students can access from different computers or devices in a quick and easy way, they should be directed and instructed on the search, selection and analysis of

adequate and relevant information to the training objectives of the course and also to help them in their intention to generate significant learning.

Eight professors agreed on the fact that e-learning and virtual classrooms are "vital" instruments today, technology broadens the field of vision that is no longer limited to the classroom, but goes far beyond, with the understanding that education now takes place at any time and in any place if both professors and students know how to take advantage of it properly and effectively.

It should also be noted that some professors pointed out some disadvantages regarding the use of e-learning in the teaching-learning processes, in a purely virtual environment, where there is no strict control, among which stands out the addictive nature of the permanent use of social networks, through different devices or equipment, which causes a moment, sometimes prolonged, of distraction in students and even in professors, which is very difficult to control virtually.

Finally, according to the above and the complete analysis of the interviews with professors, it is possible to highlight the fact that most of the professors show a favorable attitude towards the use of e-learning in the teaching-learning processes, This can be evidenced by the opinions in favor of using these resources and tools in their classes, in their intention to continue using them despite the possibility of returning to face-to-face classes and also in their motivation to continue participating in training courses to use more tools to enrich their classes and the dynamic way of introducing new contents.

#### **4.1.2. Analysis of professor surveys**

The instrument used to collect the opinion of the professors of the twelve Departments of the Franz Tamayo University at its El Alto campus, is a questionnaire with 15 questions, elaborated with the intention of responding to the objectives set out in this study, this was created in a Google form, which is a Google tool that allows collecting information through online surveys in a quick and easy way.

The survey was used to analyze professors' attitudes regarding the use of e-learning in the teaching-learning process, to describe these attitudes, to identify the types of attitudes and to evaluate the predisposition of professors regarding the use of e-learning in the teaching-learning process in pandemic times.

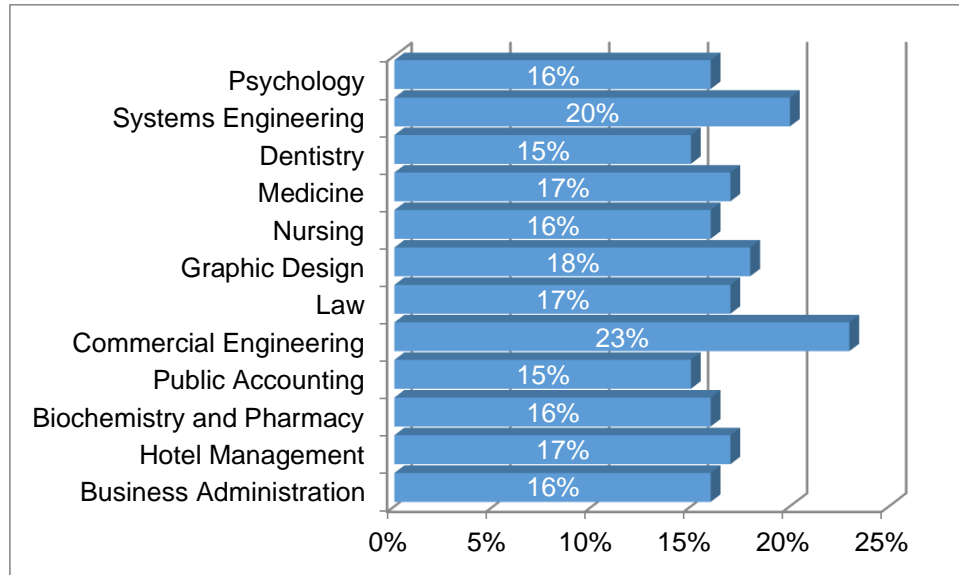
It is worth mentioning that, on the date scheduled for data collection, there were still restrictions in place and the activities continued to be carried out virtually, so there was some difficulty in sending the forms prepared for the virtual survey; however, it was possible to complete the appropriate number of professors so that the study would be valid and reliable.

A total of 152 surveys were carried out, which is the significant sample of a population of 198 professors, with a confidence level of 95% and a margin of error of 5%. The following are the results obtained after the application of the survey to the professors of the university headquarters selected as the population of this study. The answers come in the order in which they were elaborated and have a respective analysis of the data, which come in percentages, as part of the quantitative analysis that comes to corroborate the analysis of qualitative data.



Item 1.

What Department are you teaching?



Graph 1. Item 1. Questionnaire for professors

Source: Author's elaboration

This question is only a reference in terms of the percentage of participation by the professors, but it is very relevant data that shows that the questionnaire was sent to professors of the twelve departments of the Universidad Franz Tamayo, El Alto, which constitute the main target population of this study.

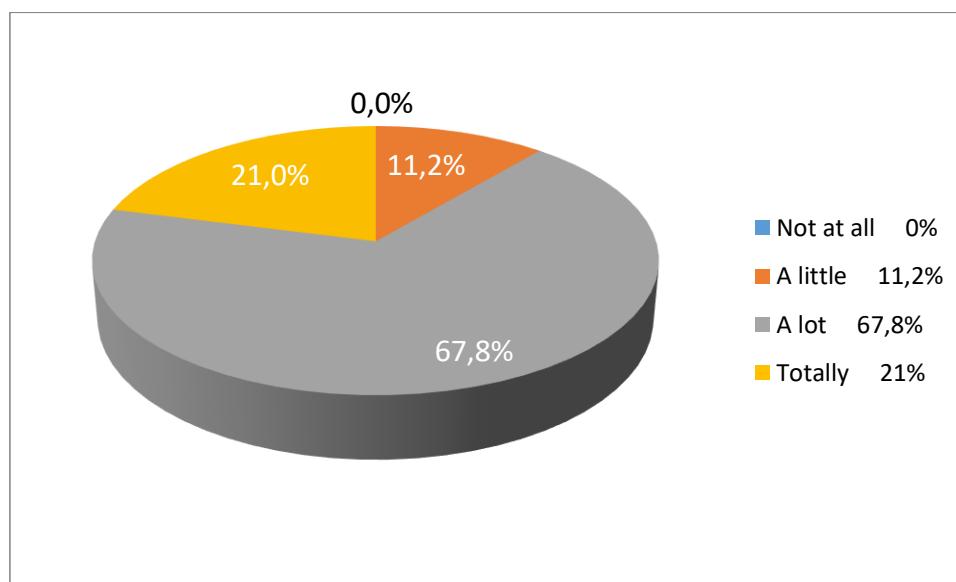
The data also reveals that there was a higher participation of professors from the Commercial Engineering department with 23%, followed by the Systems Engineering department with 20%. The third department with the highest participation of professors surveyed was Graphic Design with 18%, followed by Hotel Management, Law and Medicine, each with 17%, Biochemistry and Pharmacy, Business Administration, Nursing and Psychology, each with 16%, and finally Public Accounting and Dentistry, both with 15%. It should also be noted that many professors work in two or even three departments,

so it is very likely that a single respondent has selected several options in this item, which is why the percentages exceed 100%.

The same table reveals that the total number of professors surveyed is 152 participants, which constitutes a significant sample with a confidence level of 95% and a margin of error of 5%. The way by which the questionnaire was shared in a Google form was through the Whatsapp groups that are available at the university only for professors, however, despite the fact that communication through this medium is very fast and simple, many of them did not fill out the questionnaire immediately and some definitely did not do it, the reasons are unknown.

#### Item 2.

Do you consider that the use of e-learning (virtual spaces through which teaching-learning processes are developed through the use of electronic media) increases student motivation to learn the contents programmed in your subject?



Graph 2. Item 2. Questionnaire for professors

Source: Author's elaboration

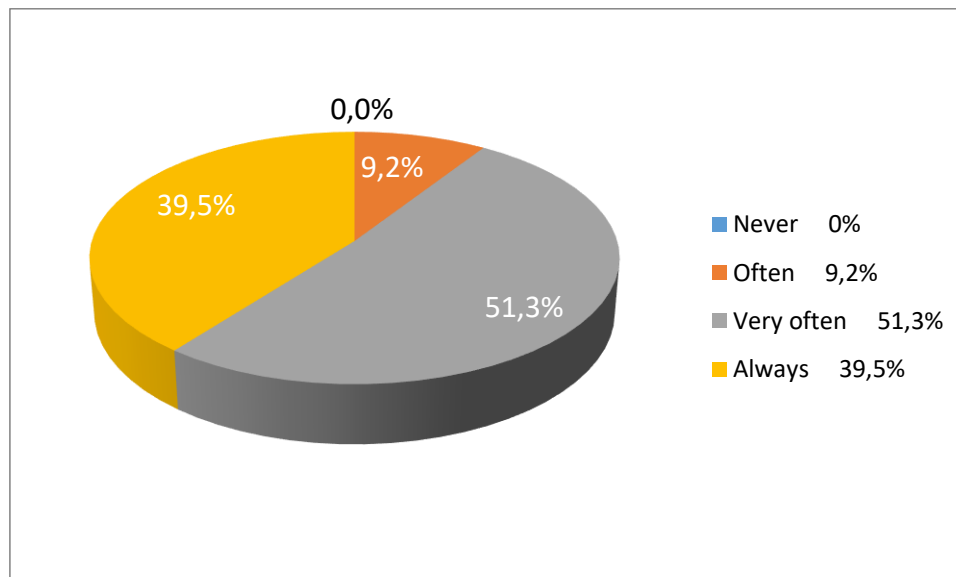
The graph shows that a majority percentage, 67.8% of the total number of participating professors, consider that the use of e-learning greatly increases student motivation to learn the programmed contents throughout the development of the teaching-learning processes. A 21,1% of them consider that students are totally motivated by the use of e-learning. A small group of participating professors, 11.2%, believes that e-learning has little influence on the motivation it can generate to learn the contents programmed in their subject.

This question has a fourth selection option, which denotes that the use of e-learning does not increase student motivation at all at the time of developing the contents; however, this option was not selected by any participating professor, which leads to the interpretation that in a certain way and to a certain degree, all of them believe that the use of this type of virtual teaching in their respective subjects is motivating.

Consequently, most professors find motivation in students when they are applying resources and tools provided by e-learning, which increases their favorable opinion regarding this type of virtual learning, so their attitude also tends to be favorable regarding the use of these virtual learning spaces for the introduction and development of selected contents for their subjects.

### Item 3.

Are you comfortable with your role as a tutor when administering courses virtually?



Graph 3. Item 3. Questionnaire for professors

Source: Author's elaboration

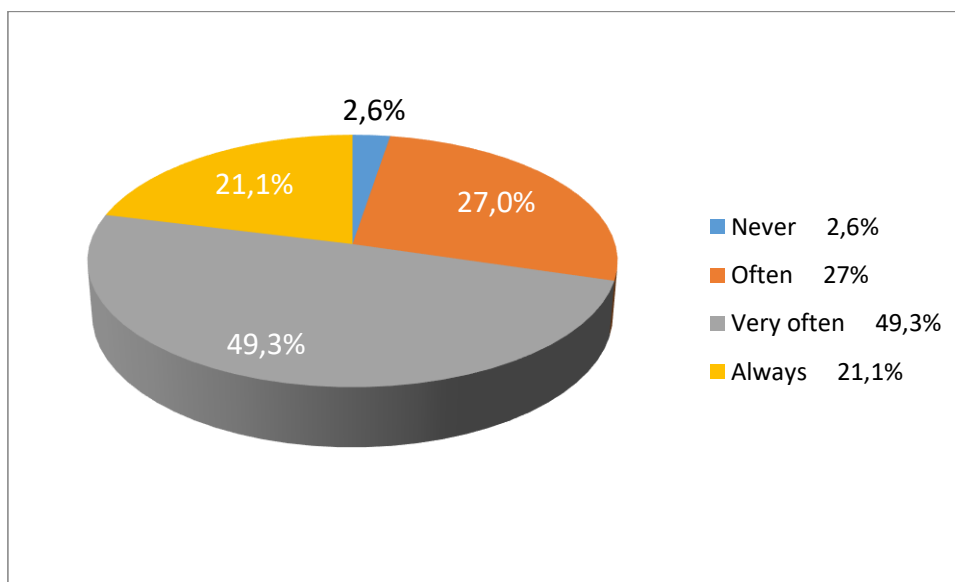
Regarding this third question, it is clear that more than half of the participating professors, 51.3%, say that they often feel comfortable in their role as tutors when they administer classes virtually. Some 39.5%, which is also considered a considerable percentage, believe that they always feel comfortable in this situation. On the other hand, a small percentage of professors, 9.2%, consider that they only occasionally feel comfortable when using virtual resources and tools, perhaps due to the lack of practice and the accelerated preparation courses, something that also came to light in the individual interviews with the professors.

It is noteworthy that, in response to this question, none of the participating professors, which can be considered 0%, chose the option never, so it is again evident that there is no professor who has a completely negative opinion or demonstrates an unfavorable attitude

towards this new way of developing teaching through virtual environments. This shows that the process of mandatory adaptation to new educational scenarios where virtuality and distance learning has been assimilated quickly and favorably by the vast majority of the professors at this university.

#### Item 4.

Do you believe that the use of virtual tools, whether as a means of communication, administration, evaluation or interaction, saves time and effort in teaching?



Graph 4. Item 4. Questionnaire for professors

Source: Author's elaboration

In terms of reducing time and effort when using the virtual tools provided by e-learning, either when applied as a means of communication, as a means of administration, as a means of evaluation or as a means of interaction with students, almost half of the professors surveyed, 49.3%, believe that this situation is often true. Twenty-seven percent of the professors believe that these tools only occasionally save time and effort. A smaller

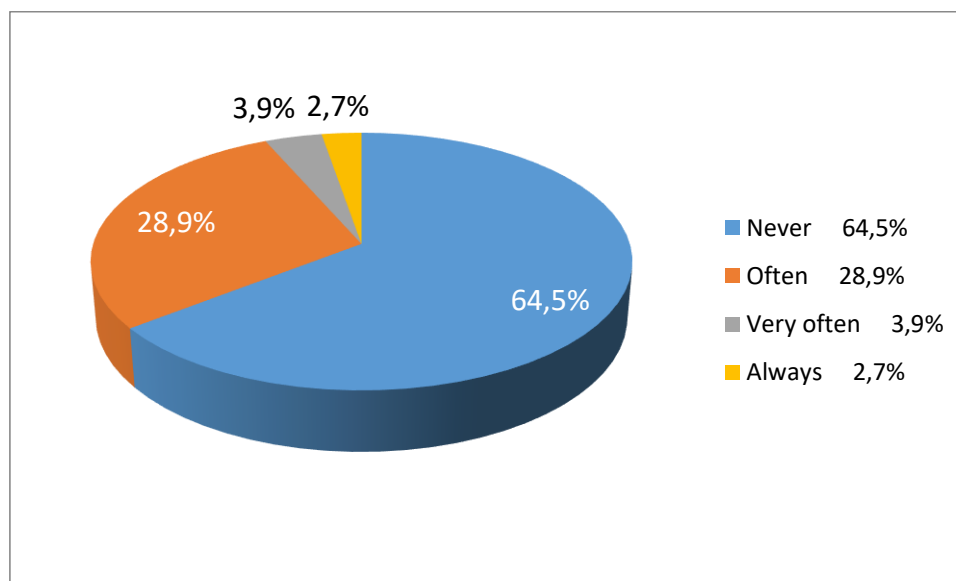
group; that is, 21.1% of the participants go to one extreme and consider that these tools always save time and effort, leaving at the other extreme a minimum percentage of 2.6% of the professors who believe that these resources do not save any time and effort and therefore do not view their use with indifference.

In this part of the statistical analysis it can also be mentioned that the use of social networks for academic purposes is becoming very popular in the educational field. A great majority of the professors send and/or receive assignments from their students through these media. Assignments that may contain written documents, images and supporting videos are sent through virtual resources and tools, which implies less time delay in the delivery of the assignments and less complications to do so.

The high percentage of professors, who carry out this activity, i.e. sending and/or receiving work from their students through social networks, suggests that there is an attempt to link the use of this technology with the objectives planned by each professor.

Item 5.

Do you consider that the incorporation of e-learning in the teaching-learning process tends to displace the work of the professor?



Graph 5. Item 5. Questionnaire for professors

Source: Author's elaboration

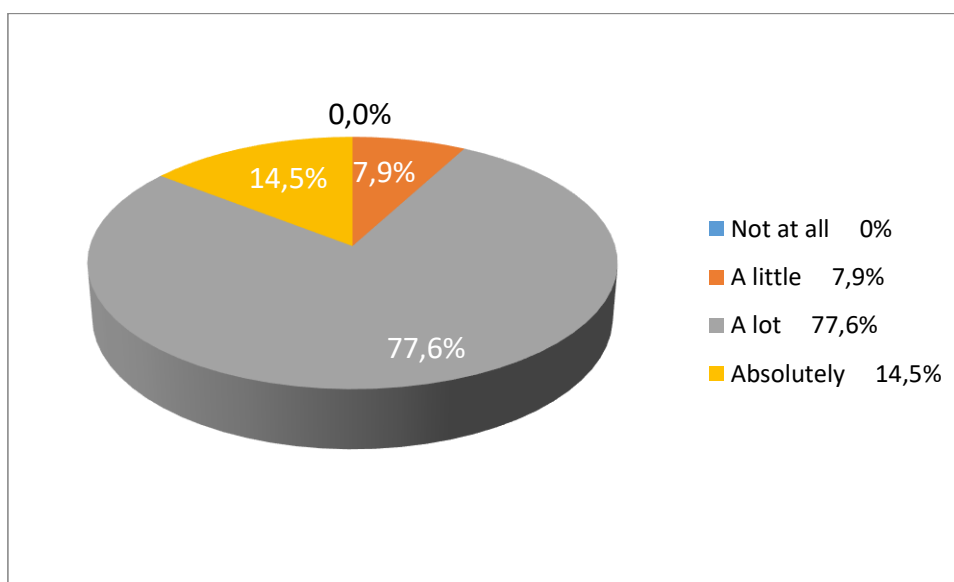
The data, according to the responses of the participants, reveal that a higher percentage of professors, 64.5%, believe that the incorporation of e-learning in the teaching-learning processes does not displace the teaching function and only 2.7% believe the opposite, claiming that the incorporation of e-learning tends in a certain way to displace the work performed by the professor.

On the other hand, a small percentage of professors 3.9% believe that this situation of displacement of the professor's work frequently occurs when e-learning is incorporated into the teaching-learning process, and 28.9% of the professors surveyed believe that this happens only occasionally.

If only the highest percentage is taken into account, it is understood that the professors, for the most part, are in favor of using e-learning in the teaching-learning processes, since they do not feel uncomfortable with this situation, seeing the use of virtual resources and tools as a support rather than a threat.

Item 6.

How confident are you in the use of e-learning as a means for the development of teaching-learning processes?



Graph 6. Item 6. Questionnaire for professors

Source: Author's elaboration

As for the confidence that the professors have in the use of e-learning as a means of support to develop the teaching-learning processes, a large percentage (77.6%), more than three quarters of the respondents think they have a lot of confidence and 14.5% have absolute confidence, both percentages reflect an opinion in favor of the use of e-learning in virtual academic activities.

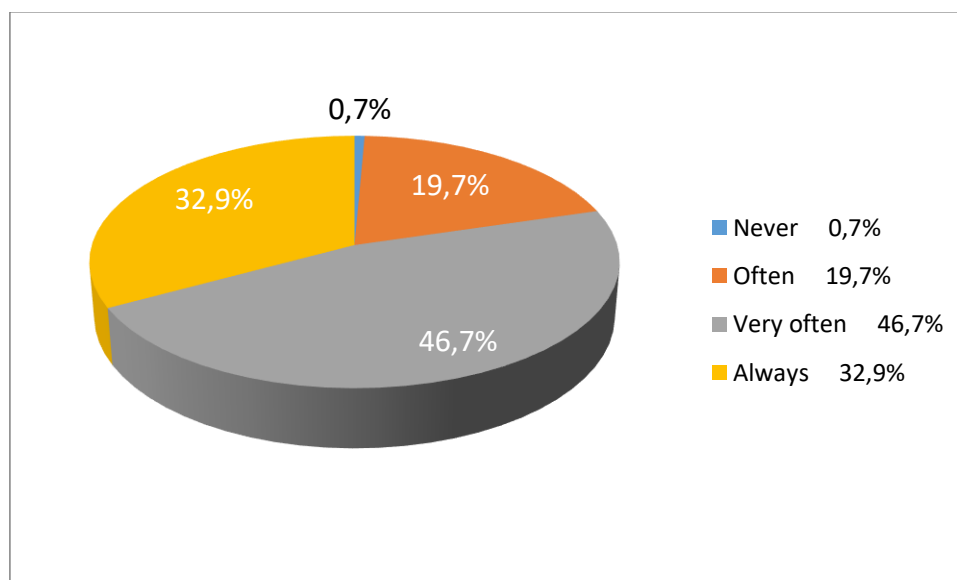


Looking at the opinions against the use of e-learning, only 7.9% of the participating professors have little confidence in the product that can be obtained when working with virtual resources and tools. On the other hand, none of the respondents chose the first option that referred to having no confidence at all in the use of e-learning as a means of development for teaching-learning processes.

Once again, the large number of professors who feel confident in the virtual tools and resources provided by e-learning, it is very evident that they will continue to use them, demonstrating a great predisposition for the use of e-learning in all teaching-learning processes. These data corroborate the opinions expressed in the individual interviews in which all the professors noted this intention.

#### Item 7.

Are you comfortable teaching via camera, whether computer, tablet or cell phone?



Graph 7. Item 7. Questionnaire for professors

Source: Author's elaboration

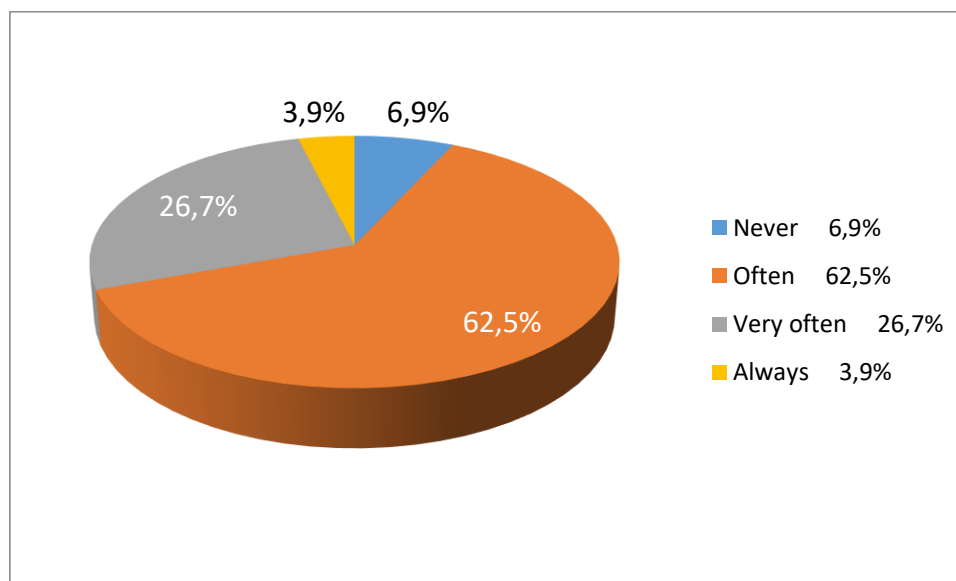
In response to this question, 32.9% of the respondents said that they always feel comfortable teaching classes using a camera, 46.7% of the participants said that they often feel comfortable in this situation, so that their virtual classes are carried out with total normality as there is no difficulty or discomfort when using a camera to conduct a synchronous session with their students.

A very low percentage, 19.7%, said that they only sometimes feel comfortable using a camera to teach their classes, and a much lower percentage, 0.7%, equivalent to only one person out of all respondents, said that they never feel comfortable in this situation.

Once again, the majority opinions in favor of virtual platforms and applications that use a camera to interact in a synchronous manner and that may well replace, to a great extent, the face-to-face situation to which one was accustomed and that occurs when interacting directly in a classroom are ratified.

Item 8.

Do you consider that in virtual classes there is more interaction between the professor and the student than in face-to-face classes?



Graph 8. Item 8. Questionnaire for professors

Source: Author's elaboration

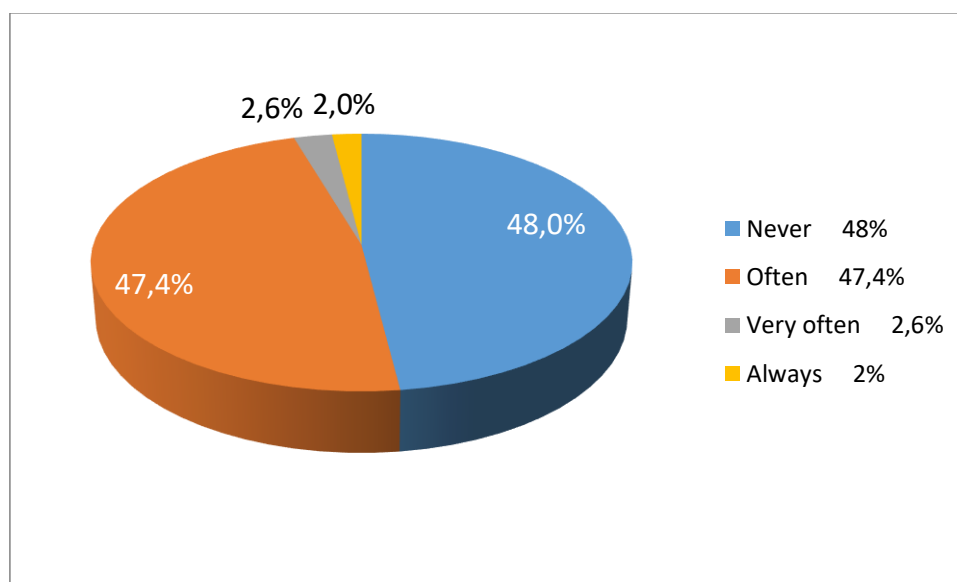
Although it was understood, with the previous question that there is no major inconvenience on the part of the professors when using a camera to teach classes and interact with students; in this question, when comparing virtual classes with face-to-face classes, in this question, when comparing virtual classes with face-to-face classes, the majority opinion, 62.5% of those surveyed, is that only sometimes there is greater interaction between professor and student virtually, while 26.7% think that this interaction is frequent; however, it is understood from the answers given that the professors find greater interaction when the classes are face-to-face.

Completing the other statistical data of this question, minimum percentages, 3.9% of the participants think that there is always a greater interaction in a virtual way than in a face-

to-face way. On the other hand, 6.9% of the participants think the opposite, they prefer face-to-face classes because they find it easier to have contact and respond to the needs of the students.

#### Item 9.

Do you consider that the use of e-learning in the development of teaching-learning processes is not very beneficial?



Graph 9. Item 9. Questionnaire for professors

Source: Author's elaboration

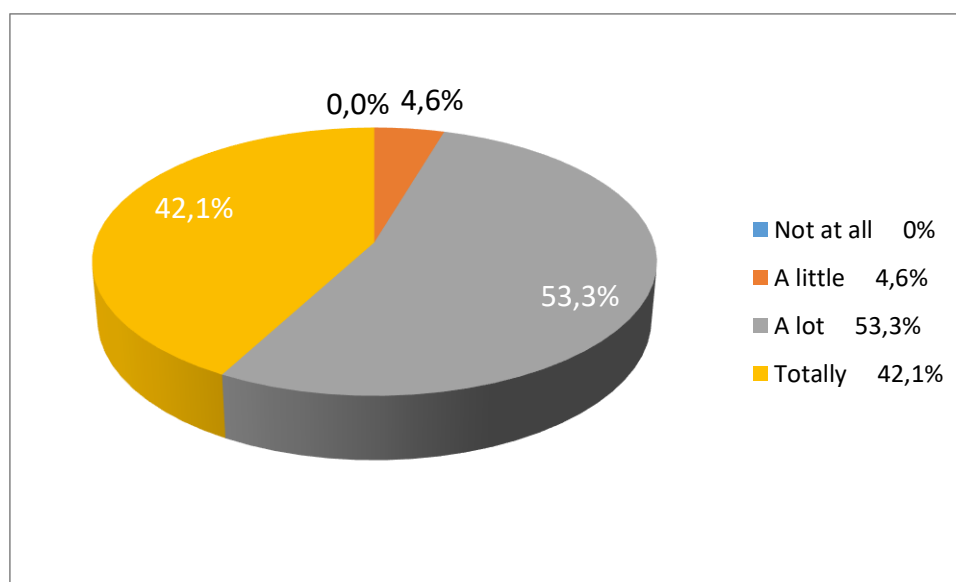
Regarding the use of e-learning in the teaching-learning processes, 2% of the participants think that these processes are of little benefit, another percentage, also reduced, 2.6% of the respondents think that these processes often tend to become of little benefit. This situation confirms that it is a very small group of professors who believe that the processes carried out through the use of e-learning are of no benefit to the educational field.

Meanwhile, 47.6% of the participating professors believe that only occasionally these processes are of little benefit, while 48% of the respondents see much benefit for the educational context when applying them as resources and support tools for academic activities in their respective subjects.

These data endorse the favorable opinions that were found in the individual interviews, showing a positive and favorable attitude since the professors find in the resources and tools provided by e-learning a support that is of great benefit to the teaching-learning processes, especially when gamification is applied, which makes the programmed activities dynamic and entertaining.

Item 10.

How motivated are you to learn more about e-learning?



Graph 10. Item 10. Questionnaire for professors

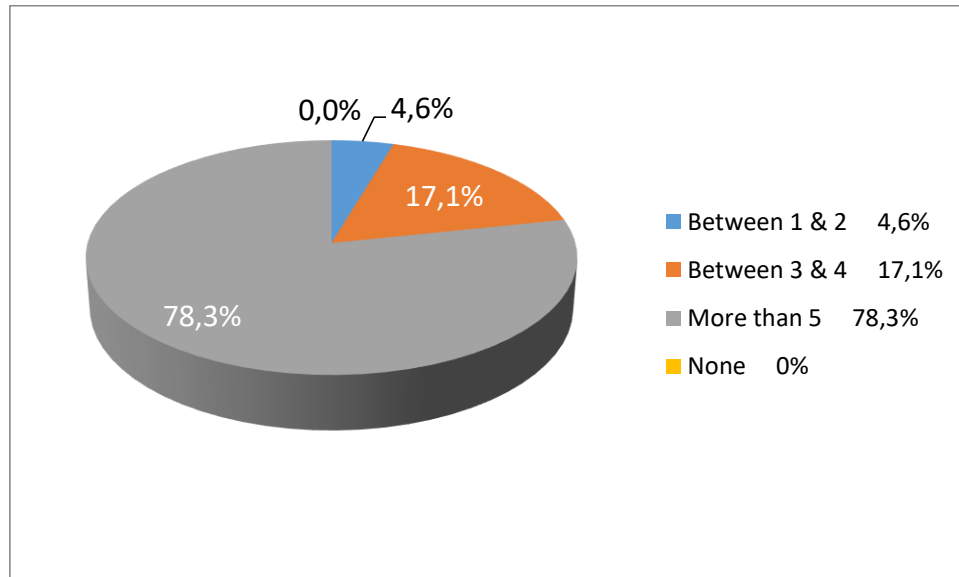
Source: Author's elaboration

This question refers to the motivation that the professors have to continue learning more about the resources and tools that can be used in virtual teaching through e-learning. In response, 42.1% feel totally motivated to continue learning, 53.3% are very motivated. Both responses show a high degree of opinion in favor of continuing to learn about e-learning and its applicability in different subjects.

On the other hand; 4.6% of the professors, feel little motivated in this situation. Again a very small percentage demonstrates certain negativity regarding the use of e-learning. This situation is confirmed by the fact that none of the respondents selected the option of not at all motivated. Consequently, the opinions against e-learning are much lower than the opinions in favor of continuing training in the use of virtual tools to develop the teaching-learning processes.

Item 11.

How many training courses have you taken to be able to develop the teaching-learning processes?



Graph 11. Item 11. Questionnaire for professors

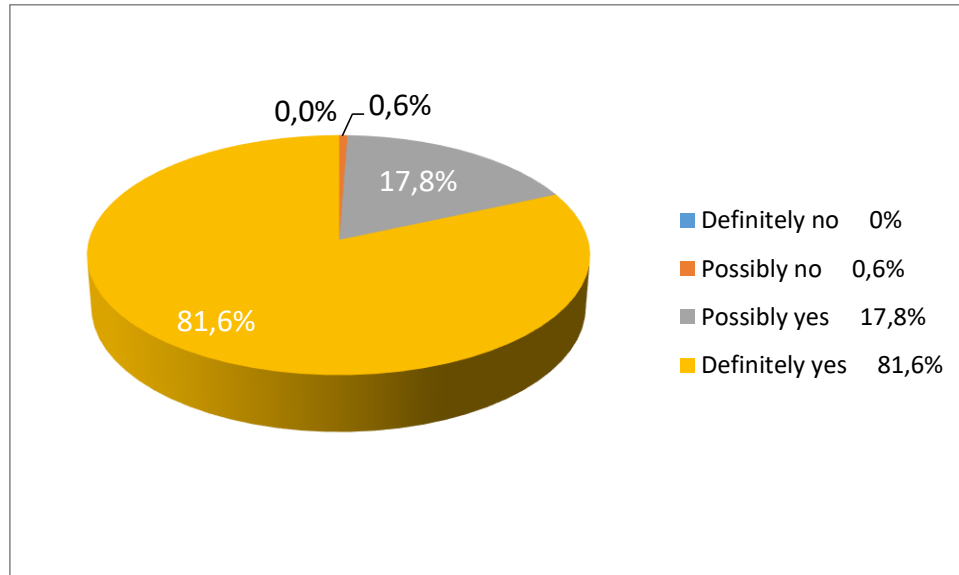
Source: Author's elaboration

Regarding training, whether institutionally directed or self-taught, a higher percentage of the respondents, 78.3%, responded that they had more than 5 courses in all this time, 17.1% had between 3 and 4 training courses and only 4.6% of the professors participating in the survey had barely between 1 and 2 training courses.

However, it can be understood from all these answers and also because none of the professors selected the option of none, that all the professors have had training courses, noting that the vast majority have a high degree of training due to the number of courses they have taken during this time.

Item 12.

Would you be predisposed to continue training in the use of virtual tools from now on?



Graph 12. Item 12. Questionnaire for professors  
Source: Author's elaboration

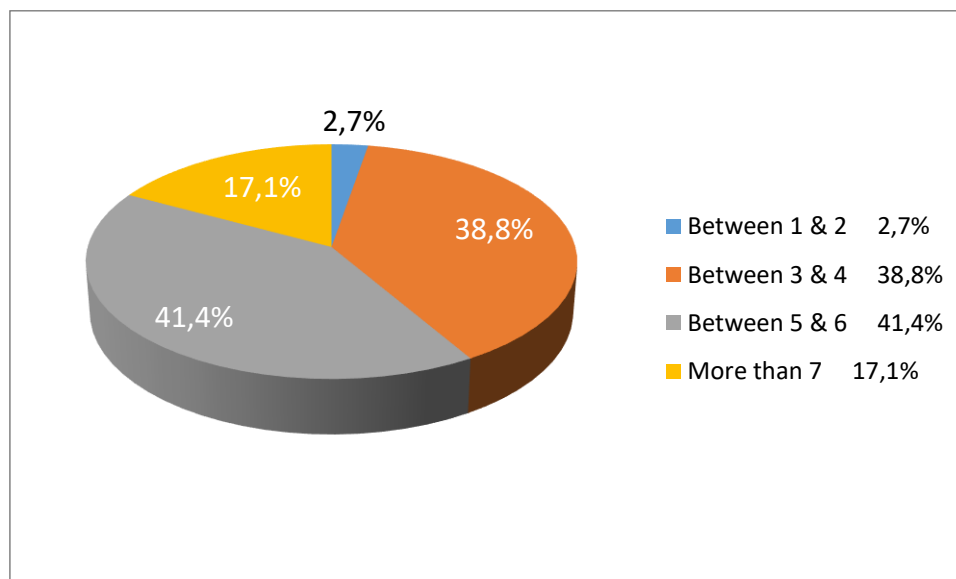
The data found confirm the high degree of predisposition of the professors surveyed regarding their intention to continue training even when activities return to normal. 81.6% are of the opinion that they will definitely continue training, 17.8% say that they might do so and only 0.6%, equivalent to only one person out of the total number of those surveyed; say that they might not do so.

This question has an option of definitely no, which suggests that they do not intend to continue training in the use of tools and applications developed for virtual education. This option was not selected by any of the participants, which shows that in a certain way, to a greater or lesser degree, highlighting the first of these; they do intend to continue taking training courses on e-learning.



Item 13.

How many virtual resources do you use when developing the teaching-learning processes?



Graph 13. Item 13. Questionnaire for professors

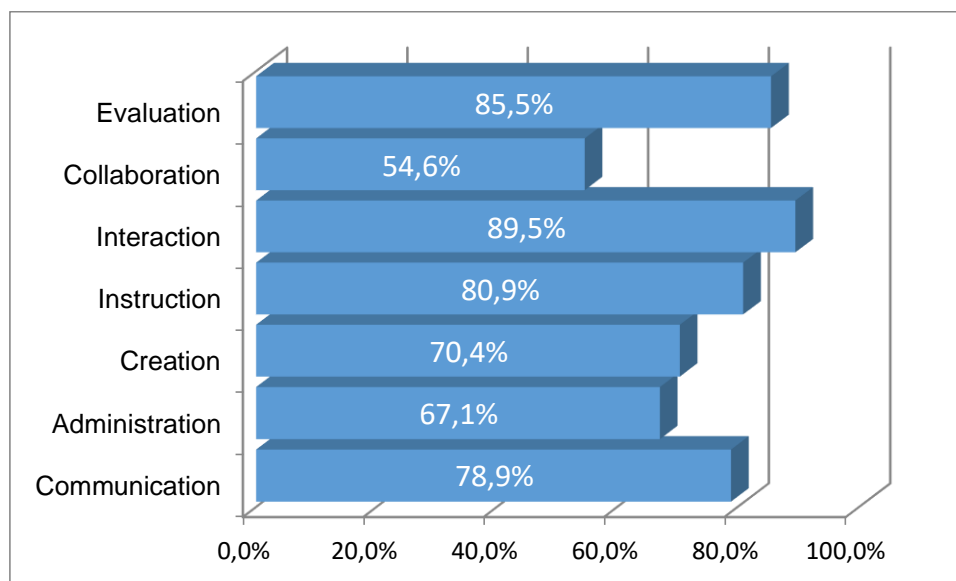
Source: Author's elaboration

Taking into account the number of virtual resources used in the teaching-learning process, on a scale from highest to lowest, 17.1% of the respondents use more than 7 resources, 41.4% of the participating professors use between 5 and 6 resources, 38.8% use between 3 and 4 resources, and only 2.7% of the surveyed participants use 1 or 2 resources.

This situation makes us understand that most of the professors use several resources when developing their virtual classes. It is to be expected that, since the classes are purely virtual in the current context, at least a couple of resources should be used; however, if we wish to enrich the teaching methods and techniques, the number of resources to be used should be increased, and this is exactly what the surveyed professors are doing in their classes.

Item 14.

What virtual tools do you use most frequently in the training process? (you can select more than one)



Graph 14. Item 14. Questionnaire for professors

Source: Author's elaboration

Given the above question and the current context of restriction in educational institutions, it is evident that all the professors use virtual tools when developing the teaching-learning processes. Consequently, this question only relates to the ways in which these tools are used. For the purposes of analysis, the way in which the surveyed professors use the resources and tools provided by e-learning will be indicated from the highest to the lowest degree.

In that sense, 89.5% of the professors use virtual tools as a means of interaction with students; it is very likely that the most used means are social networks as a means of messaging and video conferencing tools to have direct contact with students. The 85.5% of the participants use the tools that serve them to evaluate the contents introduced in each

subject, for this purpose there are many resources available, among them Google Forms, Quizizz, Liveworksheets, among others.

On the other hand, 80.9% of the participants use the tools as a means of instruction, i.e., the instructions necessary for the normal development of the activities scheduled throughout the semester are carried out through these virtual media. In the individual interviews, it was highlighted that documents are generally shared for downloading through different media, especially social networks and Google drive, as well as other storage media.

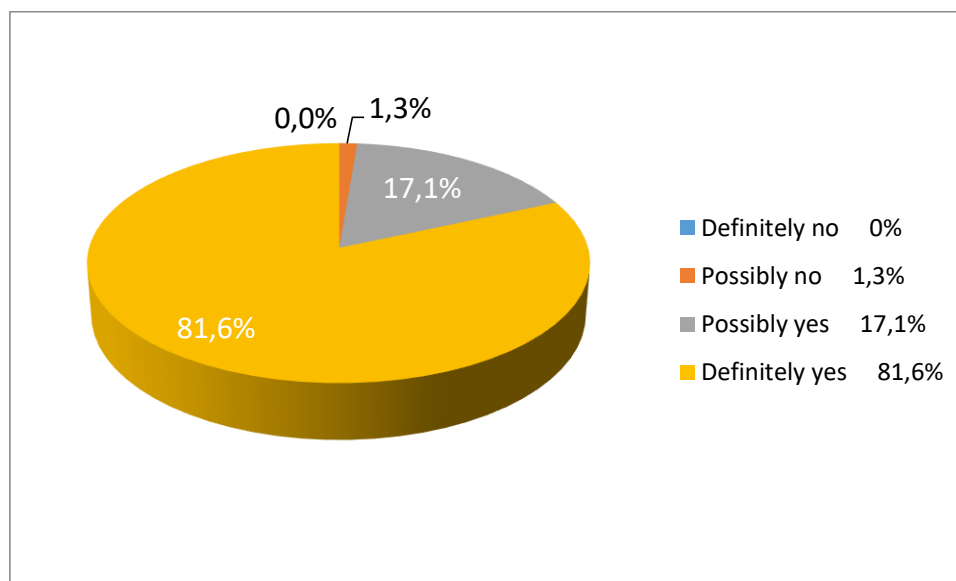
In other data, 78.9% of respondents communicate with their students periodically through different virtual resources, once again highlighting social networks such as Whatsapp and Messenger, among others. 70.4% of the professors use different virtual resources as a means of creating activities that reinforce the topics introduced throughout the process, for this purpose the professors use Gamification, as this contributes to making the classes more enjoyable and reinforces the contents in an entertaining way.

The least used forms are the administration of courses with 67.1% and the collaborative form with 54.6%, however, it should be noted that these are not very low percentages and are very relevant when analyzing the ways in which the professors use virtual resources and tools. The platforms Google Classroom, Moodle, Teams, Schoology, stand out in the administration of virtual courses. On the other hand, it is understood that collaborative learning is a good learning strategy, for which there are different resources proposed by the Google platform itself.

This question helps to understand that the professors as a whole use the resources and tools provided by e-learning to be able to carry out their classes with total normality in the event of not being able to have access to the usual face-to-face classes in the classrooms of the different higher education institutions.

Item 15.

Do you intend to continue using classroom management tools: Classroom, Moodle, Schoology or other, when returning to face-to-face classes?



Graph 15. Item 15. Questionnaire for professors

Source: Author's elaboration

The purpose of this last question is to check the intention of the professors to continue using all the tools they have learned or have been using during this time when virtuality has replaced the traditional forms of teaching-learning. It is understood by the high percentage of answers obtained in favor of continuing use virtual tools, 81.6%, that in view of the probability of returning to the traditional classrooms in the different educational centers in the not too distant future, the professors will not leave aside everything they have learned and used so far, which suggests that a mixed class, a combination of face-to-face and virtuality, will prevail from now on.

Consequently, 17.1% of the professors surveyed think that they may continue to use the different virtual tools, a very small percentage, 1.3%, which is equivalent to two people

out of the total number of professors surveyed, may no longer use these resources. Finally, no respondent chose the option of definitely not, which shows that almost all the professors are predisposed to continue using all the virtual tools and resources that they have learned and have been using up to now.

It is understood, from the statistical data found and the opinion expressed by some professors in the individual interviews, that the educational paradigms have changed and have evolved more towards the use of technology and this is how many of them have understood it; therefore, to leave it all aside would be to go back to an outdated context.

#### **4.1.3. Analysis of student surveys**

In order to gather the opinion of the students of the twelve departments that make up the El Alto branch of the Franz Tamayo University, a questionnaire with 10 questions was prepared, which has the purpose of responding to the objectives set out in this study. The questionnaire was elaborated in a Google form to be shared virtually and thus reach the largest possible student population.

The survey was used to analyze the opinion of the students in relation to their perception of the attitudes demonstrated by the professors regarding the use of e-learning in the teaching-learning processes, with the purpose of confirming or denying the opinion of the professors described in the previous section.

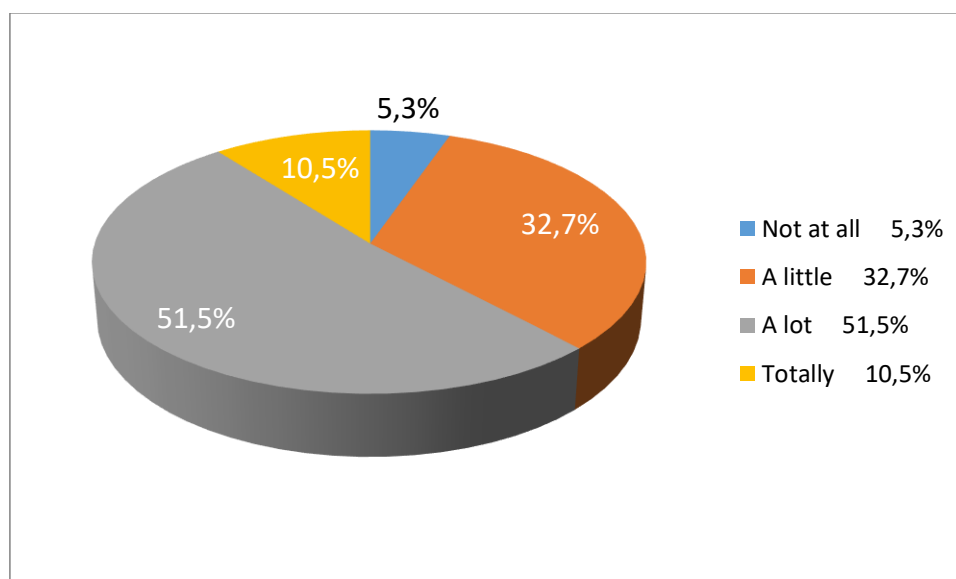
It is worth mentioning that, on the date scheduled for data collection, there were still restrictions and the activities were still being carried out virtually, making it difficult to distribute the surveys in person, so it was also convenient to conduct the surveys virtually through a Google form, thus reaching the appropriate number of students from the different departments for the study to be valid and reliable.

A total of 342 surveys were carried out, which is the significant sample of a population of 3820 students, with a confidence level of 95% and a margin of error of 5%. The following are the results obtained after the application of the virtual survey to the students of the university campus selected as the population of this study. The answers come in the order

in which they were elaborated and have a respective analysis of the data, which come in percentages, for each item.

#### Item 1.

Do you consider that the use of e-learning (virtual spaces through which teaching-learning processes are developed through the use of electronic media) increases your motivation to learn?



Graph 16. Item 1. Questionnaire for students

Source: Author's elaboration

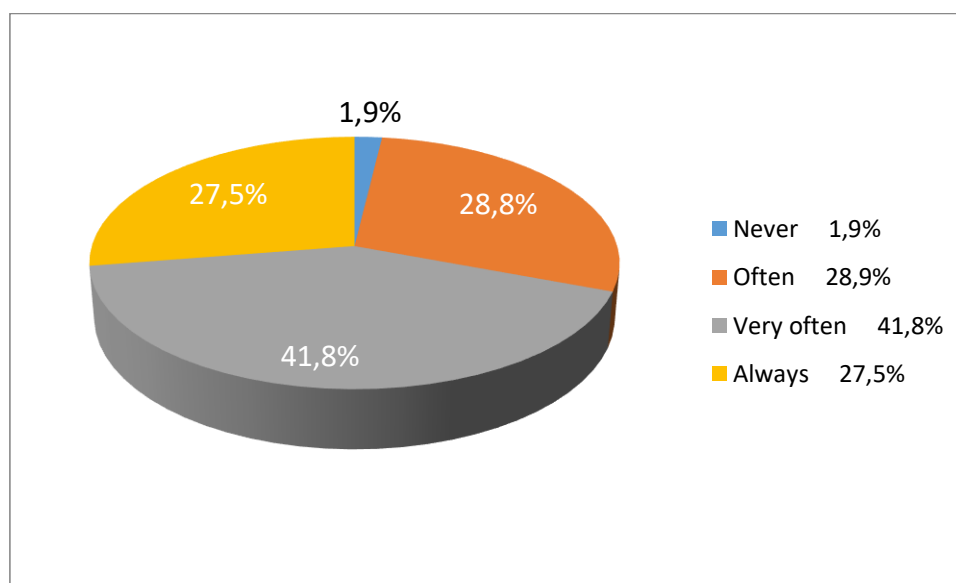
Regarding the motivation shown by students in this new scenario, the data show that 10.5% of the total number of respondents thinks that the use of virtual tools and resources totally increases their motivation, 51.5% of them think that this new virtual context offers a lot of motivation. Both answers make a majority percentage that denotes that students feel that the use of e-learning increases their motivation when the teaching-learning

processes are being developed, so it can be affirmed that there is an opinion in favor of the use of these virtual resources and tools.

On the other hand, 32.7% of the participating students think that they are not very motivated, and 5.3% think that the use of e-learning does not increase their motivation to learn at all. If these data are crossed with the opinions of some of the students interviewed, it can be interpreted that these students have many difficulties and shortcomings when facing a virtual context in their education, which may explain their low motivation.

Item 2.

Do you think that your professor is comfortable administering courses virtually?



Graph 17. Item 2. Questionnaire for students

Source: Author's elaboration

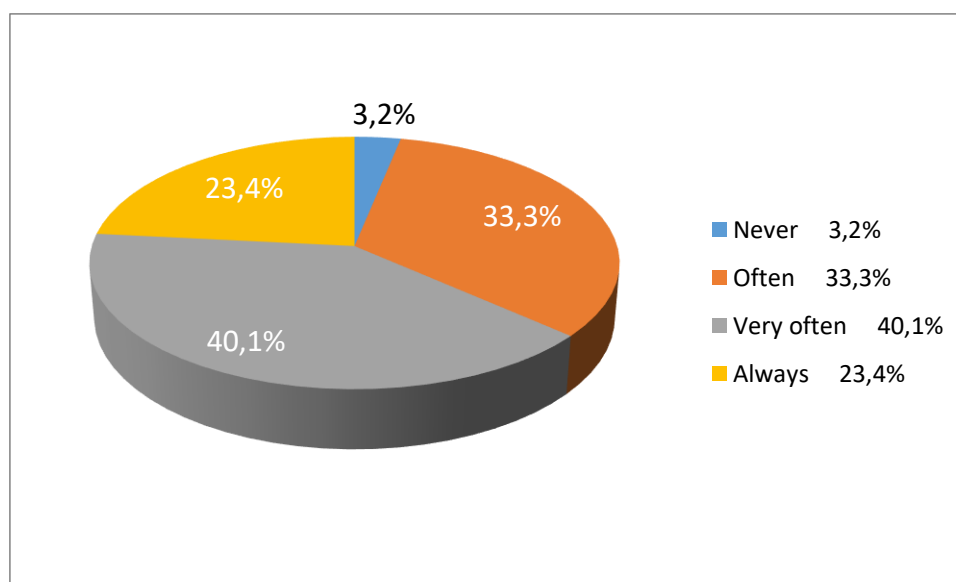
This question is directly related to item 3 of the professors' questionnaire, in that sense, the students' appreciation towards their professors when they administer their courses virtually shows that 27.5% of the respondents think that they always perceive comfort in their professors, 41.8% frequently perceive this comfort in their professors, so that classes

and programmed activities are developed in a normal way. This situation somehow confirms the opinion of the professors, the comfort demonstrated by the professors in this new scenario of virtuality is perceived by the students.

Moreover, 28.9% believe that they only occasionally perceive some comfort in the professors at the moment of developing the teaching-learning processes. Once again, this situation confirms the data found in the survey of professors, between opinions in favor and against the use of e-learning in the teaching-learning processes and the comfort demonstrated by the professors in this new scenario.

### Item 3.

Do you believe that the use of virtual tools, whether as a means of communication, administration, evaluation or interaction, saves time and effort in teaching processes?



Graph 18. Item 3. Questionnaire for students

Source: Author's elaboration

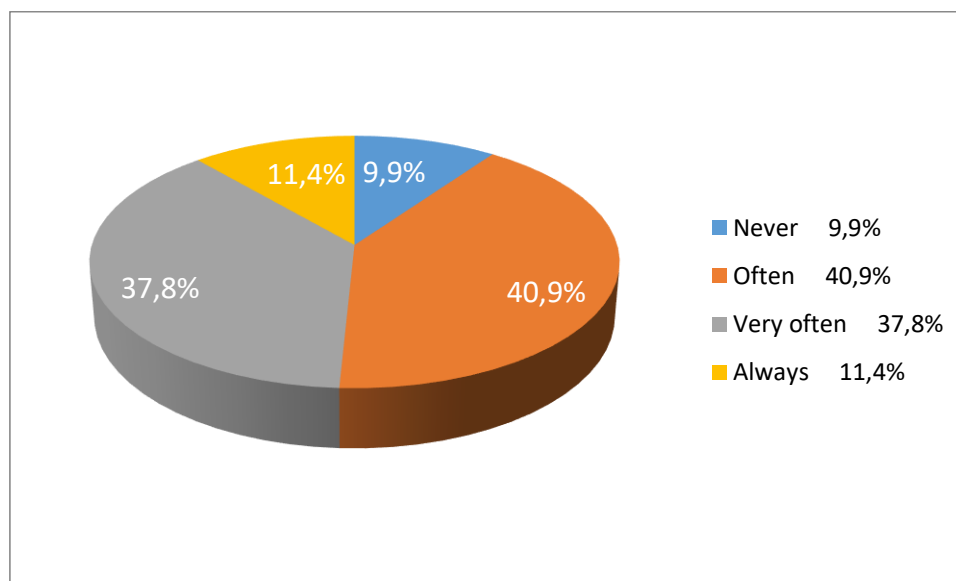


This question confirms the data obtained in item 4 of the survey to professors, in which the data obtained refer to the fact that time and effort are saved when using virtual tools and resources in the teaching-learning process. The data obtained in this question refer to the fact that 23.4% think that this situation of saving time and effort always occurs, 40.1% think that this situation happens frequently, again both answers constitute a majority percentage in favor of e-learning.

In addition, 33.3% of the participating students believe that this situation of saving time and effort only occurs on occasion and is not frequent; finally, a minimum percentage, 3.2% of the students believe that virtual tools and resources do not save time and effort at all. The opinions for and against coincide between professors and students, this helps the processes to develop normally, despite the limitations and difficulties that both parts may have.

Item 4.

Do you think that the incorporation of e-learning in the teaching-learning process tends to displace the work of the professor?



Graph 19. Item 4. Questionnaire for students

Source: Author's elaboration

The purpose of this question is to interpret the opinion of the students regarding the professor's work in this virtual scenario in terms of the incorporation of e-learning in the teaching-learning processes. This opinion is very personal and does not necessarily coincide with that expressed by the professors, in that sense, a majority percentage, 40.9%, is of the opinion that this situation of displacement only occurs occasionally, 37.8% is of the opinion that this happens frequently, so it is considered that sometimes the presence of a professor is no longer necessary when learning certain contents and can be done in a self-taught way with the help of the resources available on the Internet.

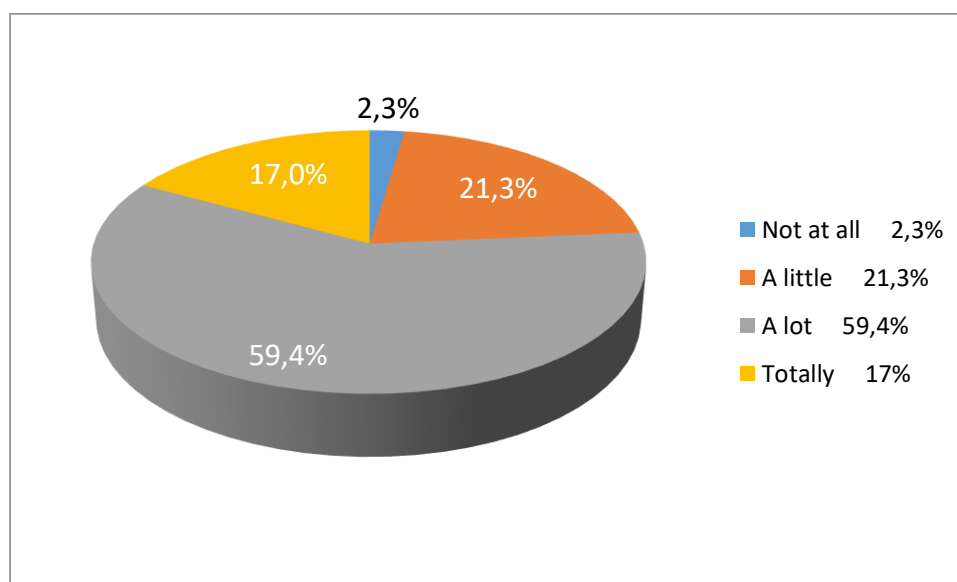
Otherwise, 11.4% are of the opinion that the incorporation of e-learning in the teaching-learning processes has displaced the role of the professor and, on the contrary, 9.9% of the

students participating in the survey are of the opinion that this situation does not occur and that the interaction of the professor is always necessary in all the processes and activities that are being developed in the educational field.

It is necessary to clarify that these are two opinions that have different points of view due to the role they play in the educational context and that they may not coincide due to this same situation. Most of the professors believe that this new context does not displace them, while a large percentage of students believe the opposite, something that may well be the subject of another investigation to contrast these opinions in greater depth.

#### Item 5.

How much confidence do you perceive your professor has in the use of e-learning as a means for the development of teaching-learning processes?



Graph 20. Item 5. Questionnaire for students

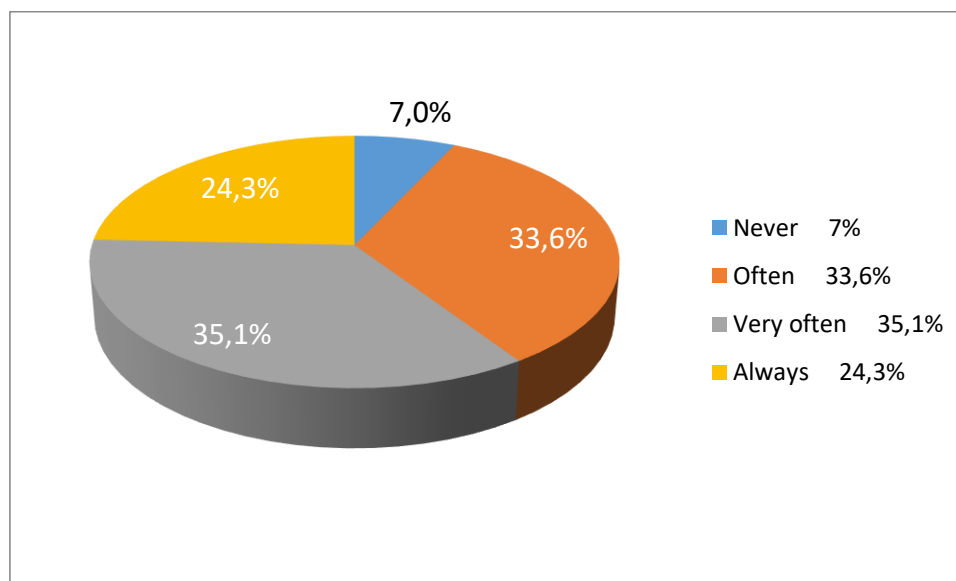
Source: Author's elaboration

The intention of this question is to confirm or deny the opinion expressed by the professors in item 6 of the survey for professors. The data obtained suggest that 59.4% of the participants perceive a great deal of confidence in their professors when using e-learning tools and resources, and 17% believe that their professors show absolute confidence when teaching their classes in a completely virtual environment; both opinions confirm the answers obtained by the professors in the aforementioned item.

In contrast, 21.3% of the students perceive little confidence in the professors when they are applying virtual resources and tools in the development of the teaching-learning processes and 2.3% think that they do not perceive any confidence in their professors, this last data reflects a very low percentage in relation to the total number of students participating in the survey, so again it can be said that the data obtained in the survey for professors is confirmed in relation to the confidence they show when using e-learning as a means of teaching.

Item 6.

Do you feel comfortable with your professor passing classes through a camera, whether it's a computer, tablet or cell phone?



Graph 21. Item 6. Questionnaire for students

Source: Author's elaboration

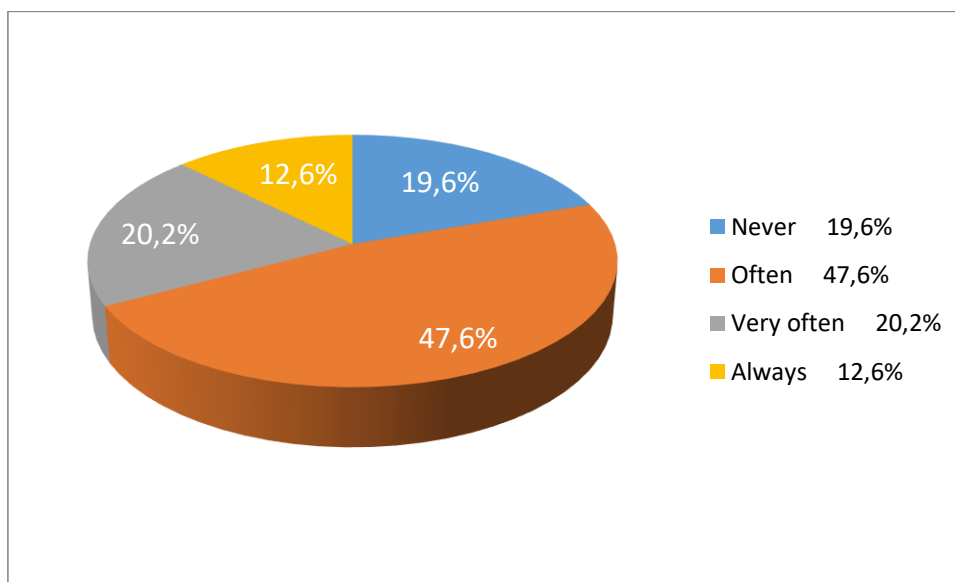
This question reflects the students' opinion on the situation of comfort or discomfort when meeting with the professors through a camera and can be contrasted with the opinion of the professors expressed in item 7 of the survey for professors, in that sense, the data obtained reflect that 24.3% of the students feel comfortable at all times, 35.1% think that they often find comfort when they have to interact with the professors synchronously through a camera.

The 33.6% only occasionally feel comfortable when passing classes through a camera and 7% believe that they do not feel this comfort at any time. Once again, this last figure reflects a very low percentage, so it can be interpreted, contrasting both opinions, that of the professors and that of the students, that the vast majority of both groups feel some

comfort at the time of developing classes through a video camera, which leads to understand that virtual classes can be developed with total normality. This opinion of comfort may well be inferred in a position in favor of the use of virtual resources and tools that may well be demonstrated in the attitude of the professors.

Item 7.

Do you consider that in virtual classes there is more interaction between the professor and the student than in face-to-face classes?



Graph 22. Item 7. Questionnaire for students

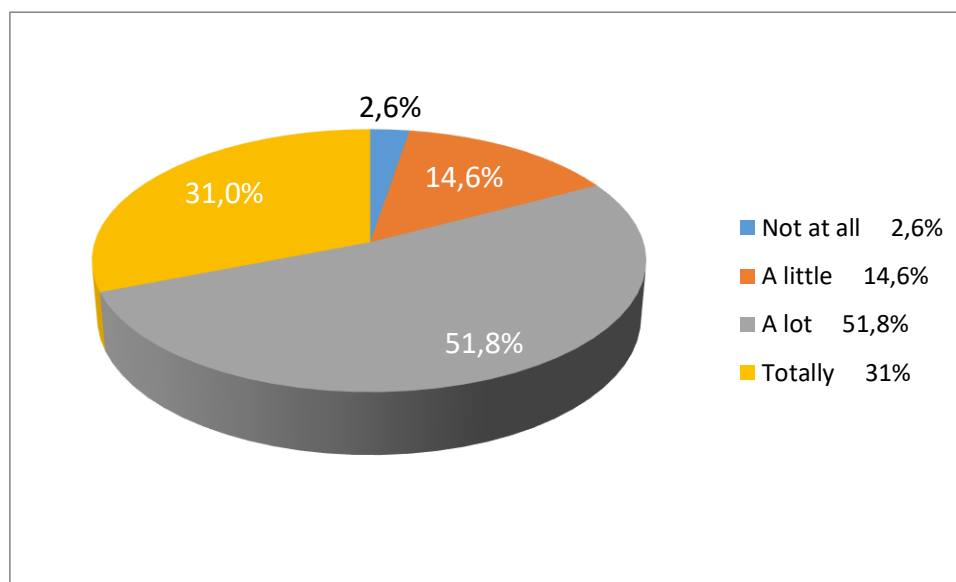
Source: Author's elaboration

This question is also intended to contrast the opinion of the professors on the interaction between professors and students in virtual classes in comparison with the face-to-face classes to which they were accustomed. A minority percentage of students, 12.6%, believe that there is always more interaction in these virtual classes and 20.2% express that there is often more interaction in virtual classes compared to face-to-face classes.

Nonetheless, 47.6% of the respondents are of the opinion that only occasionally there is a greater interaction and 19.6% of the students prefer face-to-face classes because they believe that there is not a good interaction with the professors in virtual classes, both percentages reflect a majority opinion in the sense that there is not a good interaction in this type of classes, an opinion that is also shared by the professors reflected in the answers they gave to this question. This leads to the interpretation that they are still in the process of adapting to this new context of virtuality and that the face-to-face classes to which they are accustomed continue to be a scenario of greater interaction between professors and students in the opinion of both groups.

Item 8.

How qualified do you perceive your professor is when developing virtual classes?



Graph 23. Item 8. Questionnaire for students

Source: Author's elaboration

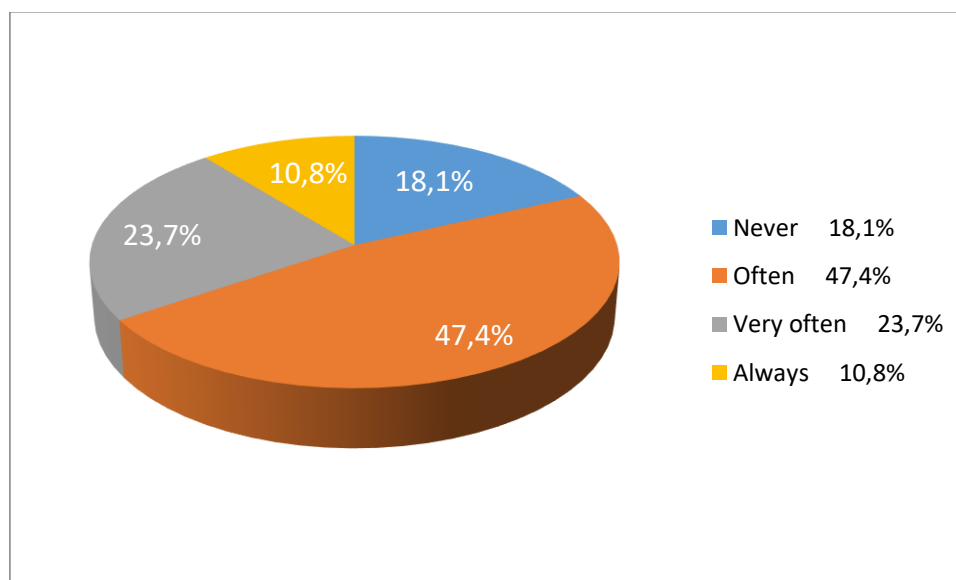
In response to this question, 31% of the respondents answered that their professors are fully trained in the use of virtual resources and tools, while 51.8% perceive that the

professors are very well trained. This situation, i.e., the high percentage of students' opinions in favor of the high level of training shown by the professors, confirms the latter's assertion regarding the training courses they say they have taken and the way in which they carry out their classes with the help of these resources and tools.

The following two data reflect a small percentage of students who believe that their professors have little training, that is, 14.6%, and only 2.6% perceive that the professors are not trained at all. As a result, the vast majority of the students surveyed are positive about the high level of training of the professors, and the intention of the latter to continue their training in the future is understandable.

#### Item 9.

Do you consider that the use of e-learning in the development of teaching-learning processes is not very beneficial?



Graph 24. Item 9. Questionnaire for students

Source: Author's elaboration



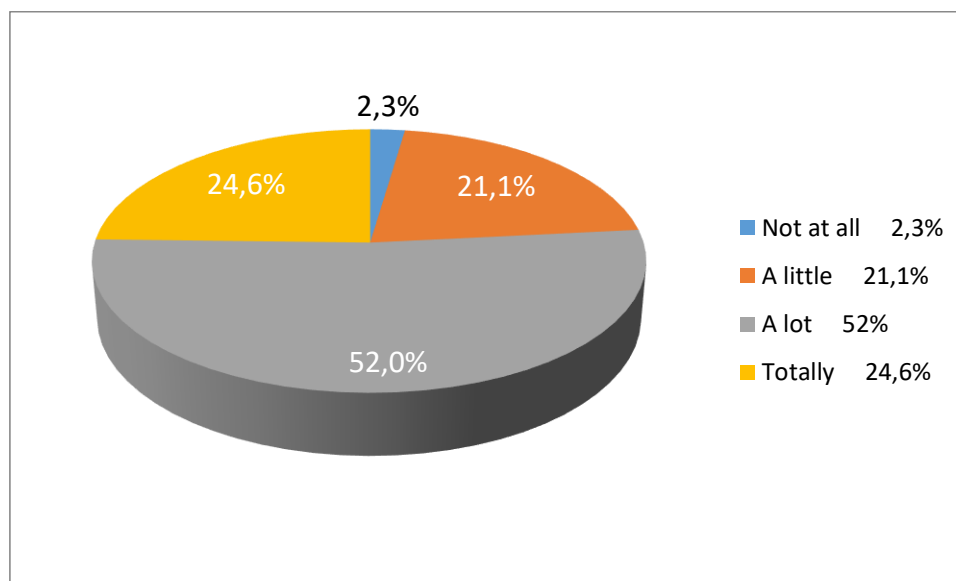
The data obtained in this question reflect the divided opinion of the students in the sense of considering the use of e-learning in the teaching-learning processes as not very beneficial, and on the other hand, those who do not consider it so. However, 47.4% of the students think that sometimes this way of education becomes boring and consequently not very beneficial. 23.7% think that this situation occurs frequently.

At the extremes, 10.8% of the participating students are of the opinion that the use of e-learning in the teaching-learning process is always of little benefit, which shows that this group has a very unfavorable opinion of the use of e-learning. On the other hand, 18.1% of the surveyed students think that this situation is not true and that on the contrary; the use of e-learning is always very beneficial.

The data obtained in this item of the survey for students can be contrasted with the individual interviews in which it can be interpreted that the favorable opinion may be due to the fact that the professors seek to use many and varied tools that make the classes more entertaining, and the opinions against it are most likely due to the difficulties that they had when connecting to the Internet network that complicates the normal monitoring of the class, so that this situation can be interpreted as a limitation and therefore not very beneficial for these students.

Item 10.

How motivated do you see your professor to implement technological tools and resources in their virtual classes?



Graph 25. Item 10. Questionnaire for students

Source: Author's elaboration

This last question is directly related to the motivation of the professors described in items 10, 11, 12 of the professors' survey and the way in which students perceive that the professors are in terms of the motivation they show. 24.6% of the respondents perceive that the motivation shown by the professors is total, 52% think that they see a lot of motivation in the professors when implementing virtual tools and resources in their classes. These favorable opinions confirm the opinion and feelings of the professors expressed in the previously mentioned items.

However, there are also contrary opinions such as the one expressed in the sense that they see little motivation in the professors; this constitutes 21.1% of the total number of surveys carried out and finally, 2.3% of the participating students do not find any motivation in

the professors. It should be emphasized that this last figure constitutes a very small percentage, and consequently, the data obtained in the survey for professors are confirmed in relation to the motivation expressed by them in terms of the use of the resources and tools provided by e-learning, the predisposition to continue training and the intention to continue using them in the future, even when the restrictions are lifted and the situation returns to normal.

## **CHAPTER V**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1. CONCLUSIONS**

The conclusions of this research work were drawn based on the verification of the fulfillment of the objectives and the confirmation or negation of the hypothesis proposed at the beginning of this study. Both the general objective and the specific objectives, which are closely related to the operationalized variable, were the guiding threads for the research to be carried out in a methodical and systematic manner.

To begin this part of the study, it is important to mention once again that the current pandemic context, involving quarantine and restrictions, in which the whole world has been plunged, has generated a new educational context in which virtuality plays a leading role. It is true that in recent years technology has had great advances, since it has been renewed and innovated according to the demands and needs of users, however, none of the main educational actors, namely professors and students, were prepared to face this new challenge, so the actions taken in different universities and the way in which the professors and students overcame different obstacles, made academic activities can develop with some normality.

In view of the general objective: To analyze professors' attitudes regarding the use of e-learning in teaching-learning processes in pandemic times, it is considered that after the analysis of the data obtained this objective has been satisfactorily completed.

Based on the data analyzed, it is possible to highlight the predisposition that the professors are showing to face this unforeseen but obligatory situation that all educational centers are still going through due to the COVID 19 pandemic, especially those of higher education. It is evident that many resources and tools were used by the professors during the whole

school year, all this to be able to cope and face the training processes normally in a virtual way.

It should be noted that, in a very short time, many of the professors had to be trained in an accelerated manner, and this was also done virtually, in order to then use what they had learned in the different stages of the development of the contents programmed in each subject. Consequently, a favorable attitude on the part of the professors towards the use of e-learning to develop the teaching-learning processes can be evidenced, and this is ratified by the opinion of the students.

Although the way to connect to the Internet is currently fast and simple and the costs are not very high, this connection is not always adequate in all urban and peri-urban sectors, much less in places far from the cities. This type of inconveniences plus those related to the lack of devices or equipment suitable for regular classes, have been the factors that influence in a low qualification of the students, towards the professors, as for the form in which the academic activities were carried out and the perception that the first ones had as for the attitude demonstrated by the professors in the virtual classes.

It can be deduced that the professors found different ways to replace their usual tasks related to communication, management, information, creation and collaboration that were carried out in person, this time in a purely virtual scenario mediated by the tools and resources provided by e-learning.

On the other hand, even though the data obtained also helped to describe the attitude shown by the professors when developing virtual classes, supported by different resources and tools, it was not possible to identify the development of methodologies directly related to the use of e-learning in teaching-learning processes at the higher education level, which means the relationship between the selected method or methods and the application of this type of education in the mentioned processes is not yet clear.

Although there are, in theory, some methodological currents, linked to the main learning theories, such as connectivism, that can be used to propose specific forms and times of

use of these tools, they have not yet been developed, and this situation could be understood because there is no specific proposal that can serve as a basis in a purely virtual context. Although there are combined proposals such as blended-learning, which refers to a combined learning between virtual and face-to-face, these were just in pilot projects in some universities, which demonstrates and confirms the assertion that they were not prepared for this type of scenario.

Consequently, despite the favorable attitude shown by the professors towards the use of e-learning in the teaching-learning processes, it is necessary to continue working on methodological proposals that help to improve the training processes that generate significant learning in situations similar to the one caused by the pandemic.

The following is an analysis of the fulfillment of the specific objectives:

The first specific objective: To describe professors' attitudes regarding the use of e-learning in teaching-learning processes in pandemic times. For the fulfillment of this objective, the study helped to find data, both in the interviews and in the survey, that make reference to the fact that the professors, in their majority, demonstrate a favorable attitude towards the application of e-learning in the mentioned processes.

This favorable attitude can be attributed to the fact that the professors are committed to their profession and are able to adapt quickly to new challenges. Their beliefs and their perception of e-learning, which refers to the cognitive aspect, the emotional response and motivation they show and pass on to their students to continue learning with means that are just becoming fully known, which refers to the affective aspect, and the predisposition and the way in which they interact with the students, trying to recreate what was developed in face-to-face classes with the help of virtual tools, which refers to their behavior.

However, it should be noted that there is still a certain percentage, although a minority, of professors who are still in the process of adapting to the use of virtual platforms, and given their lack of comfort and security, face difficulties in the general use of these tools and their linkage with the academic activities they are developing, a situation that reflects a

certain unfavorable attitude towards the use of e-learning in the teaching-learning processes.

Moreover, it is also noted that, even though there is a great willingness on the part of the professors to participate in training courses, there is also a sector that does not see the need, considering that very soon they will return to regular face-to-face activities and, therefore, this situation should call for reflection, as long as it is understood that the penetration of this technology in the educational field is irreversible.

The second specific objective: To identify types of professors' attitudes regarding the use of e-learning in teaching-learning processes in pandemic times. In order to identify the types of attitude, the study was based on the attitude components referred to in the theoretical framework and those that form the basis for the development of the study. These components refer to cognitive, affective and behavioral.

According to the data obtained in the interviews and also in the surveys, the professors, for the most part, show a favorable attitude towards the use of e-learning in these times of pandemic. This favorable attitude can be broken down into the three components referred to above as follows:

On the cognitive side, the favorable attitude is manifested in the beliefs and perceptions that the professors have regarding the use of e-learning with a broad predisposition and without prejudice, which allowed them to adapt quickly to a new context to which they were not accustomed and to which they were almost forced by the pandemic situation generated by COVID 19.

In contrast, this attitude is also evidenced in the self-training and the training that the institution provided them, and their intention to continue taking more courses in order to improve the didactics linked to e-learning, plus the application of the different tools learned in the different stages of the teaching-learning processes in an adequate and pertinent way to the objectives programmed in their different subjects.

As for the affective aspect, the favorable attitude is manifested in the emotional response and motivation, in the confidence and comfort that the professors show and that is transmitted to the students to develop the formative processes normally.

Although it is not possible to recreate in its entirety everything that is developed or what was used to be developed in a face-to-face manner, especially when interacting with students, it is this ability of the professor to reinvent himself and adapt to this new context through the use of different tools and resources provided by e-learning that transmits those feelings of confidence, comfort and motivation that is manifested in most students.

In terms of behavior, it is very common that virtual media and tools are most often used simply as a means of communication, however, the diversity of ways in which these tools are used, that is, as a means of class management, resource management, process evaluation, content creation, synchronous and asynchronous interaction and as a means of collaborative learning, represent a dynamic behavior of the professors, reflecting an active behavior, a predisposition to the use of e-learning in the teaching-learning processes and therefore a favorable attitude.

All these components that reflect a positive and favorable attitude towards the use of e-learning in the teaching-learning processes are corroborated by the opinion of the students, which is reflected in the interviews and surveys conducted. However, it should not be left aside the fact that a certain minority group of students also has the opposite opinion, but it can be deduced that this occurs due to the limitations and difficulties they have at the moment of attending virtual classes and using the tools and resources proposed by the professors.

The third specific objective: To evaluate the predisposition of professors regarding the use of e-learning in teaching-learning processes in pandemic times. The results obtained show that there is a great predisposition, motivation and enthusiasm to face the different challenges posed by this pandemic situation and the confidence and security to use virtual resources and tools in the whole process that involves from the registration of students to the delivery of final grades virtually.



All of the above reflects a very favorable attitude on the part of the professors, which implies a positive evaluation that can be evidenced by the opinions in which reference is made to the fact that the tools and resources involved in e-learning used in virtual classes make them very entertaining and very valuable. On the other hand, the fact that they feel comfortable and confident in this new context means that they do not feel displaced and rather become suitable facilitators who accompany the students' learning processes.

This favorable and positive attitude can be well directed to create various possibilities that can be put into practice, especially if it is possible to propose the use of these resources and tools to meet the objectives programmed for each area in a totally virtual context, in the event that a situation similar to the one currently being experienced is repeated.

Nevertheless, it should be noted that it is the institutions of higher education, headed by their representatives or authorities, who should implement and develop training courses that help in the completion of assignments, evaluations, collaborative work, as permitted by each subject or discipline, and even the development of virtual classes, even when the regularity of face-to-face classes may return in the near future.

In addition, it is necessary that e-learning be used with certain adaptations to the methodologies applied to the teaching-learning processes and should not be considered as a simple substitution of them. In this way, the development of skills and abilities that can be adapted to the particular needs of each student can be made possible, allowing a greater individualization and flexibility of the educational processes, which will ultimately help students to face the new challenges that this globalized world brings day by day.

Therefore, it is concluded that as e-learning, supported by the various tools and resources that are constantly being created, acquire greater functionality in the field of higher education, and depending on the implementation of educational methodologies that make its use feasible, it will be more likely to increase its use even when educational activities return to the usual face-to-face classes, giving rise to a hybrid or combined education.

To conclude this part of the conclusions, it will be necessary to bring up the hypothesis put forward in this research work, so that it can be confirmed or otherwise denied.

Hypothesis: The professors of Franz Tamayo University show a favorable attitude regarding the use of e-learning in the teaching-learning processes in times of pandemic. According to the data obtained and analyzed, both in the individual interviews and in the surveys applied to the professors mentioned above, this assertion is fully confirmed, since, despite the unexpectedness of this pandemic situation and the forced actions that had to be taken, the professors found a way to face these difficulties, redoubling their efforts, showing a predisposition to change and a marked intention to continue training in the use of virtual tools and resources provided by e-learning to improve their teaching practice.

However, it should be noted that, as part of the findings of this research, there are still many difficulties to be overcome that are beyond the goodwill of the professors, especially those related to the unequal conditions that affect students in terms of the availability of equipment or devices for virtual classes. On the other hand, the network connectivity conditions are not the same in all places, the infrastructure and service of the companies that provide access to the Internet network in the country is not the same, this implies another obstacle that must be overcome.

Nonetheless, it will also be important to note that there is still a minimum percentage of professors who express a certain indifference and some apathy in relation to the implementation of e-learning in the educational context, claiming a certain preference for traditional face-to-face classes since they perceive a better interaction with students that affect their cognitive processes and that, consequently, increase the quality of the teaching-learning processes, from their point of view.

Otherwise, it is noted that since the pandemic situation still persists and there is no determined date for its total solution, it is necessary to fully adapt to this new educational context, proposing new models that adapt to this and other possible similar situations in which it is necessary to resort to a 100% virtual education. For the time being, a mixed

practice of a combination of virtual resources and tools plus the usual face-to-face practices must be developed to fully adapt to this context.

It will be important to establish consensus among all the educational actors, on the one hand, from the internal administration of each university, both public and private, and on the other hand, from the government representatives in charge of this sector, so that a larger budget is invested in the implementation of infrastructure and updating of human resources, so that they are in line with the scientific and technological demands that are constantly advancing.

Only in this way will the universities fulfill the role that has been assigned to them, which is to become involved in the historical development needs of the country, in the sense of producing new knowledge through the training of professionals with scientific-humanistic competencies who have developed critical and reflective thinking for the support of society as a whole.

## **5.2. RECOMMENDATIONS**

Based on the results, the study recommends that professors properly adopt instructional techniques that include virtual environments as part of the curriculum design, so that these are immersed in all teaching-learning processes that are being developed.

To use e-learning is to learn and take a step towards a new educational paradigm. The use of technological devices should be a daily practice to improve educational quality and meaningful learning for students. Professors should use e-learning tools in the classroom and motivate students to use them in their learning processes.

Another aspect that should be recommended is the implementation of more training courses for professors in order to develop methodologies according to the new educational demands with the use of technological resources and tools. This would help to create new didactic strategies that can be shared among professors.

It is also recommended to complement face-to-face courses with virtual courses with the use of technological tools in order to benefit students in their learning process, obviously with a certain analysis of the advantages and disadvantages that this may have in specific contexts.

In relation to students, it is evident that what they say, do and create is more significant than what they hear or read, so it is suggested that a more active participation can be ensured, a leading role in relation to the virtual activities that are developed thanks to e-learning. Online collaborative activities allow for greater interactivity among peers, both with the teacher and with their peers. It is also recommended to develop more pilot tests in relation to active participation and decision making on the part of students when developing or planning the use of virtual platforms as a complement to face-to-face classes.

Finally, it is recommended to develop studies related to the use of e-learning in the teaching-learning processes in specific areas of knowledge to consolidate its integration in the curricular design.

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# **ANNEXES**

## ANNEX 1

### CUESTIONARIO PARA DOCENTES UNIVERSIDAD FRANZ TAMAYO (SEDE EL ALTO)

Saludos estimada(o) Licenciada(o). Agradezco de antemano su colaboración para responder el presente cuestionario. La información obtenida solo servirá para temas de investigación. Por favor, seleccione la opción que más se acerque a su punto de vista.

1. ¿De qué carrera es usted docente?

- a) Administración de empresas
- b) Administración hotelera
- c) Bioquímica y farmacia
- d) Contaduría pública
- e) Ingeniería comercial
- f) Derecho
- g) Diseño gráfico
- h) Enfermería
- i) Medicina
- j) Odontología
- k) Ingeniería de sistemas
- l) Psicología

2.- ¿Considera usted que el empleo de e-learning (espacios virtuales a través de los cuales se desarrollan procesos de enseñanza-aprendizaje mediante la utilización de medios electrónicos) incrementa la motivación en el estudiante para aprender los contenidos programados en su asignatura?

1. Nada                      2. Poco                      3. Mucho                      4. Totalmente

**3.-** ¿Se siente usted cómodo con su rol de tutor cuando administra cursos de manera virtual?

1. Nunca      2. En ocasiones      3. Con frecuencia      4. Siempre

**4.-** ¿Usted cree que el uso de las herramientas virtuales, ya sea como medio de comunicación, administración, evaluación o interacción ahorra tiempo y esfuerzo en la enseñanza?

1. Nunca      2. En ocasiones      3. Con frecuencia      4. Siempre

**5.-** ¿Considera usted que la incorporación del e-learning en los procesos de enseñanza-aprendizaje tiende a desplazar a la labor del docente?

1. Nunca      2. En ocasiones      3. Con frecuencia      4. Siempre

**6.-** ¿Cuánta confianza tiene usted en el uso del e-learning como medio para el desarrollo de procesos de enseñanza-aprendizaje?

1. Nada      2. Poca      3. Mucha      4. Absoluta

**7.-** ¿Se siente usted cómodo al dar clases a través de una cámara, ya sea de la computadora, tableta o celular?

1. Nunca      2. En ocasiones      3. Con frecuencia      4. Siempre

**8.-** ¿Considera usted que en las clases virtuales hay mayor interacción, entre el docente y el estudiante, que en las clases presenciales?

1. Nunca      2. En ocasiones      3. Con frecuencia      4. Siempre

**9.-** ¿Considera usted que el uso del e-learning en el desarrollo de procesos de enseñanza-aprendizaje es poco beneficioso?

1. Nunca      2. En ocasiones      3. Con frecuencia      4. Siempre

**10.-** ¿Cuán motivado se siente usted por aprender más a cerca de la enseñanza virtual?

1. Nada      2. Poco      3. Mucho      4. Totalmente

**11.-** ¿Cuántos cursos de capacitación ha tomado usted para poder desarrollar los procesos de enseñanza-aprendizaje?

1. Entre 1 y 2      2. Entre 3 y 4      3. Más de 5      4. Ninguno

**12.-** ¿Estaría usted predispuesto a seguir capacitándose en la utilización de herramientas virtuales de aquí en adelante?

1. Definitivamente no      2. Posiblemente no      3. Posiblemente sí      4. Definitivamente sí

**13.-** ¿Cuántas herramientas virtuales emplea usted al momento de desarrollar los procesos de enseñanza-aprendizaje?

1. Entre 1 y 2      2. Entre 3 y 4      3. Entre 5 y 6      4. Más de 7

**14.-** ¿Qué herramientas virtuales emplea usted, con mayor frecuencia, en los procesos formativos? (puede seleccionar más de una)

Como medio de:

1. Comunicación

2. Administración

3. Creación

4. Instrucción

5. Interacción

6. Colaboración

7. Evaluación

**15.-** ¿Tiene usted la intención de continuar utilizando las herramientas de gestión de clases: Classroom, Moodle, Schoology u otro, cuando se retorne a clases presenciales?

1. Definitivamente no 2. Posiblemente no 3. Posiblemente sí 4. Definitivamente sí

## ANNEX 2

### CUESTIONARIO PARA ESTUDIANTES UNIVERSIDAD FRANZ TAMAYO (SEDE EL ALTO)

Saludos estimada(o) compañera(o). Agradezco de antemano tu colaboración para responder el presente cuestionario. La información obtenida solo servirá para temas de investigación. Por favor, selecciona la opción que más se acerque a tu punto de vista.

1.- ¿Consideras que el empleo de e-learning (espacios virtuales a través de los cuales se desarrollan procesos de enseñanza-aprendizaje mediante la utilización de medios electrónicos) incrementa tu motivación a la hora de aprender?

1. Nada                      2. Poco                      3. Mucho                      4. Totalmente

2.- ¿Percibes que tu docente se siente cómodo cuando administra cursos de manera virtual?

1. Nunca                      2. En ocasiones                      3. Con frecuencia                      4. Siempre

3. ¿Cuán capacitado percibes que está tu docente a la hora de dar clases virtuales?

1. Nada                      2. Poco                      3. Mucho                      4. Totalmente

3.- ¿Crees que el uso de las herramientas virtuales, ya sea como medio de comunicación, administración, evaluación o interacción ahorra tiempo y esfuerzo en la enseñanza?

1. Nunca                      2. En ocasiones                      3. Con frecuencia                      4. Siempre

4.- ¿Consideras que la incorporación del e-learning en los procesos de enseñanza-aprendizaje tiende a desplazar a la labor del docente?

1. Nunca                      2. En ocasiones                      3. Con frecuencia                      4. Siempre

5.- ¿Cuánta confianza percibes que tu docente tiene en el uso del e-learning como medio para el desarrollo de procesos de enseñanza-aprendizaje?

1. Nada                      2. Poca                      3. Mucha                      4. Total

6.- ¿Te sientes cómodo con tu docente al pasar clases a través de una cámara, ya sea de la computadora, tableta o celular?

1. Nunca                      2. En ocasiones                      3. Con frecuencia                      4. Siempre

7.- ¿Consideras que en las clases virtuales hay mayor interacción, entre el docente y el estudiante, que en las clases presenciales?

1. Nunca                      2. En ocasiones                      3. Con frecuencia                      4. Siempre

8.- ¿Cuán capacitado percibes que está tu docente a la hora de dar clases virtuales?

1. Nada                      2. Poco                      3. Mucho                      4. Totalmente

**9.-** ¿Consideras que el uso del e-learning en el desarrollo de procesos de enseñanza-aprendizaje es poco beneficioso?

**1.** Nunca      **2.** En ocasiones      **3.** Con frecuencia      **4.** Siempre

**10.-** ¿Cuán motivado ves a tu docente al implementar herramientas y recursos tecnológicos en sus clases virtuales?

**1.** Nada                      **2.** Poco                      **3.** Mucho      **4.** Totalmente

## ANNEX 3

### TRANSCRIPCION DE ENTREVISTAS DIRIGIDAS A DOCENTES “UNIVERSIDAD FRANZ TAMAYO”

#### ENTREVISTA 1

**LICENCIADA SOLEDAD CALLISAYA**

**DURACION: 15:23 minutos**

**FECHA DE REALIZACION: 23/11/2021**

**PAOLA:** Muy buenas tardes. Por favor quisiera tener una conversación con usted a cerca de todo lo que ha sucedido desde la gestión 2020, pues la educación ha sufrido muchos cambios, tanto docentes como estudiantes hemos sido empujados a utilizar más la tecnología a través por ejemplo de las clases virtuales, a utilizar herramientas virtuales y yo quisiera consultarle: ¿Usted cómo docente de la Universidad Franz Tamayo cómo se siente con su rol de tutora al dar clases en línea?

**LIC. CALLISAYA:** Buenas tardes y gracias por la entrevista, sí, éste es un tiempo con mucha dificultad para todos, yo creo que a nivel mundial, diferentes áreas se han visto afectadas y una de las que puedo hablar es la educación. En este tiempo ha sido un reto como docente, ha sido un reto en los cambios qué ha habido en la educación, puedo decir que antes era mucho más fácil dar clases presenciales llevar material tener contacto con los estudiantes, pero ahora tenemos que estar preparados de diferente forma, tenemos que preparar nuestras clases, compartir diferentes recursos tecnológicos, aprender a manejar estos recursos tecnológicos o estas plataformas. Entonces, me siento feliz porque ha sido un reto grande para la educación, como docente me siento feliz porque hemos sabido adecuarnos y vencer este obstáculo en el manejo de tecnologías y llevar adelante la educación que es muy importante.

**PAOLA:** Quisiera consultarle: ¿Usted ha adquirido conocimiento para poder dar clases virtuales? ¿Tomó algún curso de capacitación para llegar a dar clases y virtuales?

**LIC. CALLISAYA:** Sí, felizmente, justo al inicio de la pandemia que era por el mes de marzo el Departamento de Enseñanza y Aprendizaje, que es conocido más por GEA, inicialmente nos habían capacitado con diferentes opciones de la

herramientas o plataformas que podríamos utilizar y bueno, estaba a nuestra decisión utilizar uno en la que convenga mejor, ya después durante conforme la pandemia avanzaba, el semestre avanzaba o culminábamos, en el receso del 2019 en el invierno del 2019 también nos han dado un curso, un curso que lo denominábamos Bookcam de herramientas tecnológicas pero específicamente para dominar el Moodle, es la plataforma que utilizamos ahora en todas las materias y también poco a poco nos han dado ciertas capacitaciones para hacer un mejor uso de Zoom o Google Meet y también cómo llevar un aula virtual, Cómo organizar el aula virtual, Qué herramientas deberíamos utilizar, no como docente pero como directora también he tenido otra capacitación pero luego que se ha proyectado a los docentes en el mes de enero del 2020 y ésto era más que todo analizar qué tecnologías iban adecuado a la materia y a aquellos resultados de aprendizaje que queríamos lograr con los estudiantes, ya estamos evaluando de toda la variedad de tecnología que tenemos a disposición, no es solamente compartir y utilizarlo sino es si acompaña y te ayuda a llegar al resultado de aprendizaje que te has planteado. Entonces, si he recibido bastante apoyo y creo que con este apoyo... si no hubiera sido por este apoyo, tal vez no estaría capacitada, me sentiría no sé... Un poco temerosa de llevar las clases virtuales, pero ahora no, me siento bien y son gracias a estas capacitaciones.

**PAOLA:** Quisiera consultarle ahora: ¿De qué manera usted usa las herramientas virtuales?

**LIC. CALLISAYA:** De diferentes formas, primero viendo como me voy a reunir o cómo voy a hacer el encuentro con mis estudiantes, tengo que saber si escoger Zoom o Meet u otra opción que existe y saber si mis estudiantes también conocen de esa herramienta, también para llevar a cabo las clases virtuales como tal, tengo que hacer presentaciones, entonces ya no voy solamente utilizando lo que es el PowerPoint, hay diferentes herramientas tecnológicas, como el Canvas, el Genially, que puede ser que esta presentación vaya mucho más allá, de que no sólo sea imágenes y texto, sino ya la herramienta de Quizziz, que puede ser que a media presentación le preguntas qué opinas al estudiante y él inmediatamente puede compartirme que está entendiendo o no está entendiendo y esas opciones de presentación de recursos o de avances de materia es importantes y también para ver si nuestros estudiantes pueden... Bueno para que no sea solamente un aprendizaje donde él docente expone, necesitamos implementar la Gamificación y en esto también se puede utilizar no sé... Los Google Forms, Quiziz, Genially o El Puzzle y necesitamos estar no solamente es exposición, sino también juntarlo con Gamificación, cosa que los estudiantes puedan disfrutar y aprender y también a la vez disfrutar estar contentos con lo que aprenden, entonces, en cada momento al llevar una lección o al tener una clase creo que es importante pensar si entra o no esta herramienta tecnológica, incluso si solamente hacemos una presentación de PowerPoint, necesitamos ver qué herramienta nos va ayudar a



complementar para ver el medio en que los estudiantes van a compartir sus actividades porque ellos pueden hacerlo a través de WhatsApp, pueden hacerlo a través no sé de Google Forms u otras herramientas pero hay que ver si son adecuadas o no, entonces creo que para todo el momento de una clase necesitamos pensar si va o no va una herramienta, si les va ayudar a los estudiantes o va a ser muy complicado o es mejor sólo utilizar una y de ahí que ellos puedan también conocer más de esta herramienta.

**PAOLA:** Quisiera consultarle: ¿Cómo está la interacción entre docentes y estudiantes durante las clases virtuales?

**LIC. CALLISAYA:** Honestamente las personas que se conectan en clases sincrónicas, es decir que si tenemos clases los martes a las 9:00 yo me conecto por Zoom y tiene que haber una sincronía entonces los estudiantes también tienen que conectarse, cuando hay estudiantes y hay bastante asistencia es muy bueno, porque hay preguntas que se hacen pero como también hay clases donde no se conectan muchos y los que están, están tal vez en otras cosas, ese factor no podemos un tanto controlarlo, hay días en que están conectados, están participativos, como que hay otros días que no están todos conectados y de éstos también puede ser no están al pendiente de la clase y es un poco difícil controlar esa parte, pero en la mayoría del tiempo yo creo que depende del docente, si el docente hace una clase aburrida, el estudiante solo se va a conectar y va a dejar prendido el micrófono y no va a atender, pero si es un docente que no solamente habla o hace una clase magistral, si hace una clase participativa e interactiva, el estudiante va a decir: “Ah no, tengo que participar porque la docente hace ésto, ésto, entonces tengo que participar ahí”. Esas clases interactivas, participativas son en las que hay mayor éxito y mayor atención por parte de los estudiantes. Entonces, en resumen, puedo decir de que sí hay cosas buenas en cuanto a la sesión con los estudiantes virtualmente obviamente, pero el problema es que no podemos controlar esa parte distractiva de ellos, quieran o no están en casa y hay cosas que les distrae y si no saben apartar su espacio entonces les va a afectar en el aprendizaje.

**PAOLA:** ¿Qué opina entonces a cerca de la interacción estudiante-docente en comparación de las clases virtuales con las clases presenciales? ¿En cuál cree usted que hay más interacción?

**LIC. CALLISAYA:** Es bien difícil la respuesta, porque hay más cercanía en las clases presenciales obviamente, porque el estudiante está presente, puedes ver su comportamiento, su rostro lo dice todo y no necesitas ya hablarle porque ya en el rostro puedes ver como docente cómo está, qué ánimo tiene, si le ha ido bien, tal vez

tenga un problema o algo; y en la virtualidad se pierde esa parte porque hay algunos... La mayoría no prende cámaras, algunos porque no se sienten cómodos, otros porque están trabajando y otros porque la señal no les llega y si prende cámara reduce la calidad de la conexión, entonces hay bastantes cosas que hace que esta interacción se vea limitada de alguna forma en la virtualidad; mientras que en la presencialidad todos esos obstáculos se vencen, aún así, es una forma de llevar y de seguir con la educación, puedo decir que hay más interacción, más participación cuando son clases presenciales, en las virtuales es un poco difícil, tiene bastantes obstáculos pero es una labor del docente saber pasar estos obstáculos para que la interacción sea buena.

**PAOLA:** Quisiera consultarle si usted tiene la intención de continuar utilizando estas herramientas y plataformas virtuales en un futuro.

**LIC. CALLISAYA:** De hecho que sí porque ya no sería sólo presencial y tareas en hojas, hay que aprovechar mucho lo que hemos aprendido ahora y yo llevaré una clase mixta, una híbrida, donde los estudiantes sigan aprendiendo de la tecnología y saber entregar a través de esta plataforma sus trabajos y yo como docente seguiré innovando diferentes clases aunque sea presenciales pero utilizando tecnologías, yo llevaría una clase híbrida por qué a futuro yo creo que en el mercado laboral ya los estudiantes no solo trabajan para su país, ellos si quieren pueden aplicar trabajar en línea con otras empresas y tienen que conocer de tecnologías, entonces que mejor aprender en aula y con diferentes asignaturas y estar practicando esa virtualidad y ya cuando sean profesionales y tengan que trabajar para Colombia u otros países a distancia pues manejar una tecnología no va a ser nuevo sino van a estar predispuestos a aprender y llevar su trabajo de esa forma.

**PAOLA:** Con eso Tal vez usted está diciendo que tal vez se siente motivada ¿Cómo se siente entonces al aprender más acerca de esta enseñanza virtual?

**LIC. CALLISAYA:** Me siento realmente motivada porque me da más opciones de cómo llegar al estudiante, ya no sólo es la pizarra, la pizarra es algo importante sí, tal vez no vamos a sacarlo de un aula porque es importante pero estas herramientas tecnológicas y conocerlas es un complemento que puede hacer que el aprendizaje vaya mucho más allá y podemos llegar de diferentes formas a los estudiantes. Qué bueno es que un docente o una persona utilice todo lo que tiene pero en algo bueno, qué es el aprendizaje, entonces sí, yo me siento motivada en seguir aprendiendo más de tecnologías y recursos educativos tecnológicos.

**PAOLA:** Muchas gracias por su tiempo y bueno será hasta otra oportunidad, buenas tardes

**LIC. CALLISAYA:** Buenas tardes, gracias.

## **ENTREVISTA 2**

**LICENCIADA VANESSA COCHE**

**DURACION: 08:04 minutos**

**FECHA DE REALIZACION: 30/11/2021**

**PAOLA:** Muy buenas noches Licenciada, que grato poder conversar con usted en este caso a cerca de la pandemia y de las consecuencias que ha traído, es específico, en la educación, que se ha visto perjudicada de alguna manera pero con grandes brechas que se han abierto debido al internet. Vamos a ingresar al tema de las clases virtuales, quisiera consultarle licenciada: Usted como docente de la universidad Franz Tamayo, ¿Cómo se siente con su rol de tutora en las clases en línea?

**LIC. COCHE:** Debo decir, previamente me sentía un tanto insegura aprendiendo obviamente como todos bastantes herramientas, que ya hoy por hoy las manejo no muy bien, seguimos aprendiendo por supuesto, pero debo decir que me siento más segura, más cómoda porque esto fue un reto tanto para estudiantes como para docentes y creo que más para docentes porque dependía de nosotros que los estudiantes puedan realmente aprender en plenitud todo lo que uno se les enseña, entonces ya más segura, más confiada porque hay bastantes herramientas de las cuales uno se agarra para poder impartir las clases y este rol que es tan importante, el ser docentes porque de esto depende cómo un estudiante puede llegar a adquirir los conocimientos, a aprender la materia como tal.

**PAOLA:** ¿Cómo usted ha adquirido ese conocimiento para dar clases virtuales? ¿Tomó algún curso de capacitación?

**LIC. COCHE:** Gracias al capital humano de la Universidad Franz Tamayo, hemos tenido bastantes capacitaciones respecto a herramientas, obviamente herramientas y recursos en general, pero obviamente yo por mi parte he ido indagando Herramientas específicas, recursos específicos que me sirven a mi materia. Ellos nos enseñaban herramientas para bastantes materias, pero por mi parte he ido explorando, las redes sociales hacen mucho, los grupos de profesores compartían ciertas aplicaciones, entonces yo indagaba de que se trata entonces de esa forma hemos ido adquiriendo todo lo que hoy por hoy manejamos.

**PAOLA:** Se ha visto que estas herramientas pueden ser utilizadas de distintas formas, por ejemplo: Como medio de administración, creación, instrucción, colaboración, evaluación ¿De qué manera usted utiliza estas herramientas virtuales?

**LIC. COCHE:** De todas las formas, tanto en evaluaciones, en inducciones, también para hacer retroalimentación, de todas las formas posibles, de manera que el estudiante capte porque hay que hacer malabares. Si bien el estudiante está detrás de una pantalla, no sabemos cómo él o ella se siente, yo lo uso para todos estos propósitos, evaluación, inducción, para juegos incluso aprendiendo.

**PAOLA:** ¿Y cómo está la interacción entre el docente y el estudiante en las clases virtuales?

**LIC. COCHE:** La verdad es que depende mucho del contexto social y el nivel en el que están los estudiantes. Los jóvenes universitarios de la UNIFRANZ no tienen mucha participación, están un poco ausentes a pesar de que se los motiva hay muy poca respuesta, dependiendo también de los grados. Respecto a la interacción, al inicio no había casi nada de interacción, pero ahora al nivel que ya estamos, después de un año, creo que la interacción es la misma a las clases presenciales.

**PAOLA:** ¿Usted tiene la intención de continuar utilizando estas plataformas virtuales en un futuro?

**LIC. COCHE:** Por supuesto que sí, yo creo que ayudan bastante , ya sea en una clase virtual o en una clase presencial, de hecho con algún curso ya volví de forma presencial y seguimos utilizando estas herramientas más que nada para evaluación, para hacer alguna retroalimentación, se las sigue utilizando.

**PAOLA:** ¿Usted se siente motivada por aprender más a cerca de la enseñanza virtual?

**LIC. COCHE:** Por supuesto que sí, creo que la enseñanza virtual llegó para quedarse por un buen tiempo y obviamente estamos motivados para seguir creciendo, porque cada vez hay más y nuevas herramientas y por supuesto no está de más indagar o utilizarlas y sí, yo las utilizaría de forma virtual y de forma presencial también.

**PAOLA:** Muchas gracias por su tiempo y por estar aquí Licenciada. Dios mediante nos veremos en otra oportunidad. Hasta luego.

**LIC. COCHE:** Muchísimas gracias a ti, hasta luego.

### **ENTREVISTA 3**

**LICENCIADA MONICA ICHUTA**

**DURACION: 10:47 minutos**

**FECHA DE REALIZACION: 01/12/2021**

**PAOLA:** Muy buen día, muchas gracias por acceder a esta entrevista a cerca de lo que está suscitando últimamente. Muchos docentes y estudiantes se han visto empujados a utilizar el internet para seguir avanzando en esta situación de pandemia que esperemos pronto termine. ¿Usted cómo se siente con su rol de tutora a la hora de dar clases en línea?

**LIC. ICHUTA:** Buen día. Bueno, a su pregunta, realmente me siento cómoda realizando las clases en línea porque tenemos la facilidad de las herramientas de trabajo que nos ayuda a fortalecer nuestra enseñanza a nuestros estudiantes y por otro lado la educación en línea se me hace más directa estamos a un clic, podemos hacer dinámicas, podemos hacer que todos participen a su vez; había estudiantes tímidos cuando había clases presenciales, entonces no llegábamos a los estudiantes de atrás, por decirle, en cambio ahora todos están digamos a una rectura, así a la par, entonces podemos llamarles por sus nombres, podemos hacerles participar, podemos obtener evidencias muy significativas con éso de las herramientas digitales también, entonces me parece que es cómodo, sin embargo extraño no poder ver a nuestros estudiantes, no tener contacto físico cara a cara con ellos pero bueno, en cuanto a herramientas de enseñanza sí me parece favorable.

**PAOLA:** Quisiera consultarle ahora: ¿Usted cómo ha adquirido este conocimiento para dar estas clases virtuales ¿Ha tomado algún curso de capacitación?

**LIC. ICHUTA:** Sí, nosotros a un principio de la pandemia no conocíamos mucho de estas herramientas digitales ni su uso pero en la institución donde trabajo, que es la Universidad Franz Tamayo, nos han capacitado, bueno nos capacitan semestralmente con dos o tres cursos, en cuanto a ésto de las herramientas digitales, la Gamificación, entonces nosotros como docentes nos sentimos bastante felices, bastante bendecidos con esto de la parte del GEA de la UNIFRANZ porque sí nos están capacitando. Entonces sí estamos ahí a la par, siempre está ahí el WhatsApp que está de consulta y ayuda al docente entonces si tuvieras alguna duda, entonces ellos están prestos para ayudarnos. En cuanto a la

capacitación, sí hemos recibido muy buena capacitación por parte de nuestros licenciados del GEA de la UNIFRANZ.

**PAOLA:** Ya entrando en esto de la utilización de las herramientas, se ha visto que éstas pueden ser utilizadas de distintas maneras, por ejemplo: Como medio de comunicación, administración, evaluación, instrucción, creación, entonces ¿De qué manera usa usted las herramientas virtuales?

**LIC. ICHUTA:** Bueno, como estamos ahora en clases en línea, lo utilizo para mi evaluación, para Gamificación, para no crear una clase monótona también, entonces nos capacitaron para realizar juegos interactivos de acuerdo a nuestra materia para que el estudiante tampoco se sienta aburrido, entonces hay bastante recurso que se puede encontrar en el internet, con eso de los juegos incluso hay ruletas que podemos hacerlas haciendo participar aleatoriamente a los estudiantes, entonces sí, yo utilizo bastante lo que es la Gamificación, nuestras evaluaciones, incluso para realizar nuestras diapositivas de enseñanza para la parte introductoria y bueno, la realizábamos más antes con PowerPoint, pero hemos visto que había más recursos a parte del PowerPoint y bastante dinámicos y se ven bastante atrayente para los estudiantes, sí, cuesta un poquito hacerlo pero la satisfacción de que los estudiantes aprendan y capten viendo lo que les queremos transmitir es bastante favorable.

**PAOLA:** Quisiera consultarle ahora si la interacción entre docente y estudiante actualmente es mayor o menor que en las clases presenciales.

**LIC. ICHUTA:** Bueno, se podría decir que hay un 50%, por decirle, hay estudiantes que estudian y trabajan, entonces ellos generalmente me dicen, o sea porque yo llamo aleatoriamente y digo: “Participe fulanito” y luego me dice: “Licenciada estoy en mi trabajo, soy médico y ahorita estoy de guardia” e incluso mandan sus capturas o se sacan fotos en su lugar de trabajo, pero aparte de eso hay estudiantes que si encontramos bastante comprometidos en esto de enseñarles de manera virtual, como dije, participan ellos, son bastante participativos, yo el primer semestre antes de la pandemia, tenía mi curso, entonces yo conocía a los estudiantes de adelante pero a los de atrás no los conocía mucho, entonces no podía llegar a todos ellos, por ejemplo habían estudiantes tímidos y dicen: “Ahora creo que me da ganas de hablar”. Entonces, se llega a estudiantes, digamos que tal vez no podíamos llegar por la cantidad, donde hay entre cincuenta, cuarenta y cinco, entonces como quien dice los más corchitos se sientan adelante y llegan tempranito, pero y los de atrás... Entonces no... En cambio con esta herramienta virtual, nuestros estudiantes están toditos a la par, están en una línea, entonces para ellos también es favorable porque como le digo hay estudiantes que estudian y trabajan para sustentar el pago de sus pensiones, entonces bueno es una educación bastante autónoma, entonces el estudiantes tiene que ser bastante responsables de cumplir con sus asignaciones, cumplir con los exámenes, cumplir con todo lo que se les damos nosotros como docentes, entonces

bueno ya ésto me parece favorable lo de lo virtual porque estamos formando estudiantes autónomos, no estamos ahí para decirles: y tu tarea... y tus notas... no has venido a clases, etc, entonces ellos ya son más responsables, les creamos una responsabilidad de que ellos puedan cumplir con sus asignaciones, con las tareas procesuales que nosotros les pedimos.

**PAOLA:** Consultarle: ¿Usted tiene la intención de continuar utilizando estás herramientas y plataformas virtuales en un futuro?

**LIC. ICHUTA:** La verdad sí, me parece bastante importante a manera de práctica porque hay páginas donde puedes practicar tu inglés, como soy docente de inglés ya no estoy manejando fotocopias, algo que ayuda incluso a los estudiantes en su economía, entonces mandar un link o hacer que ellos te manden el link o suban evidencia de sus tareas en la plataforma es más práctico, si Dios mediante, el próximo año volviéramos a las clases presenciales, yo creo que sí continuaría, crearía mi plataforma de Classroom que es bastante amigable, entonces ahí mandarías tareas, tendría ya dos partes: nuestra parte presencial y nuestra parte de práctica que ya sería la parte visual para que ellos estén ahí más al corriente y practiquen también más.

**PAOLA:** Entones prácticamente usted se siente motivada por aprender más a cerca de la enseñanza virtual.

**LIC. ICHUTA:** La verdad sí, los cursos que nos imparten son bastante esperados porque siempre hay algo nuevo que nos tienen que enseñar y bueno al principio de la pandemia nos encontramos así como los estudiantes porque no sabíamos cómo manejar el Moodle o el Classroom, era algo nuevo para nosotros y bueno a nosotros nos ha tocado como docentes, creo que a la mayoría, bueno en lo personal a mí sí en principio me ha tocado aprender yo tenía que aprender, me quedaba hasta tarde para discrepar tantas dudas, me ponía en lugar de mis estudiantes y cuando me tocaba pasar clases con ellos, mi clase venía con un montón de preguntas: ¿Cómo subo la tarea? ¿Cómo ingreso? ¿De dónde obtengo el link? ¿Cuál es mi código?, entonces como docentes creo que nos ha tocado primero aprender, aprender, aprender y aprender bien porque los estudiantes venían con full dudas ahí y hasta ahora siguen, por ejemplo en el uso de You Tube para presentar algunos trabajos y así no ocupar mucho espacio en la computadora.

**PAOLA:** Muchas gracias por su tiempo, Muchas gracias por acceder a esta entrevista una vez más. Hasta luego.

**LIC. ICHUTA:** Hasta luego, que le vaya bien, gracias.

## **ENTREVISTA 4**

**LICENCIADA GRACIELA CHOQUE**

**DURACION: 5:34 minutos**

**FECHA DE REALIZACION: 01/12/2021**

**PAOLA:** Muy buenas tardes, muchas gracias por acceder a esta entrevista Licenciada. Quisiera conversar con usted a cerca de lo suscitado desde la gestión 2020. Como consecuencia, esta pandemia ha traído cambios, en este caso en la educación. ¿Usted como docente de la Universidad Franz Tamayo cómo se siente en su rol de tutora al dar clases en línea?

**LIC. CHOQUE:** Desde la primera experiencia que tuvimos el 2019 por los conflictos políticos, pues ha sido un reto, ya que ni estudiantes ni docentes estábamos preparados para éso, entonces a la marcha tuvimos que capacitarnos y tratar de encontrar las herramientas tecnológicas para poder sopesar esas situaciones de aprendizaje donde el estudiante se sienta cómodo aprendiendo y obviamente el docente también se sienta cómodo aplicando esos programas.

**PAOLA:** ¿Cómo usted ha adquirido este conocimiento para dar clases virtuales? ¿Ha tomado algún curso de capacitación?

**LIC. CHOQUE:** Ha sido bastante repentino, a través de la coordinación del CIU, nos dieron unos cursos de capacitación de Zoom y la aplicación de Classroom y fue a la marcha, un mes después ya nos hicieron una capacitación completa.

**PAOLA:** ¿De qué manera usted usa las herramientas virtuales?

**LIC. CHOQUE:** Todas las herramientas virtuales se pueden usar para distintos objetivos: para transmitir o percibir la respuesta de los estudiantes e incluso evaluar, todas las herramientas son aptas para esos objetivos. Por ejemplo: En el caso de Zoom puedes evaluar al estudiante de manera cuantitativa para ver qué es lo que tiene que mejorar, en el caso de Google Forms es algo más sistemático porque ya son opciones múltiples, donde ya es algo más cuantitativo, incluso Jamboard lo podemos usar para evaluación, entonces yo pienso que todas las herramientas tienen su objetivo tanto de transmitir, recibir y evaluar.

**PAOLA:** Y... ¿Cómo está la relación entre docentes y estudiantes durante las clases virtuales? ¿Acaso en las clases virtuales hay más interacción que en las clases presenciales?



**LIC. CHOQUE:** Pienso que de la misma forma, en la institución donde estamos trabajando ahora pues hay una asistencia de cincuenta alumnos por clase y en las clases presenciales que yo recuerde la atención no siempre es al cien por ciento, puedo decir que la atención es de un cincuenta por ciento que está atento, que no está ausente, obviamente presencialmente están pero distraídos. En las clases virtuales puedo decir que estamos con un cincuenta y uno a sesenta por ciento de interacción directa, es decir, que los estudiantes están atentos a lo que se está llevando a cabo, obviamente hay un porcentaje que está bastante distraído, ausente en atención.

**PAOLA:** Quisiera consultarle si usted tiene la intención de continuar utilizando estas herramientas y plataformas virtuales en un futuro.

**LIC. CHOQUE:** Absolutamente, porque ahora veo... Cuando vas a clases tienes que llevar tu computadora, tus libros, tus fotocopias y todo lo demás, obviamente éso en el plano ambiental no es muy bueno, mucho papel, pero creo que podemos seguir utilizando las herramientas una vez que ingresemos a las clases presenciales, voy a seguir utilizando el Google Forms, el Kahoot, mis Library Sheets y todas las herramientas que ahora estoy utilizando, obviamente no con la frecuencia que ahora lo hago, pero va haber un porcentaje que sí voy a usar.

**PAOLA:** Y una última consulta ¿Cuan motivada se siente usted por aprender más a cerca de la enseñanza virtual?

**LIC. CHOQUE:** Mucho, incluso ahora me siento ignorante digitalmente porque yo conozco lo básico, creo que me defiendo, pero creo que de acá a lo básico hay mucho más y me gustaría seguir aprendiendo.

**PAOLA:** Bueno, muchas gracias por su tiempo, será hasta otra ocasión. Buenas tardes.

**LIC. CHOQUE:** Buenas tardes.

## **ENTREVISTA 5**

**LICENCIADO MAURICIO CONDE**

**DURACION: 08:59 minutos**

**FECHA DE REALIZACION: 02/12/2021**

**PAOLA:** Buenas noches licenciado, muchas gracias por acceder a esta entrevista a cerca de un tema que es realmente muy controversial y concurrente sobre los cambios que ha traído esta pandemia por ejemplo: En la educación. Entonces, quisiera consultarle ya entrando en tema, ¿Usted como docente universitario de la Universidad Franz Tamayo cómo se siente con su rol de tutor al dar clases en línea?

**LIC. CONDE:** En la parte académica hasta ahora me siento tranquilo, bueno no estoy sintiendo como otros docentes que sienten que no están llevándolo, antes de la pandemia yo había tomado cursos igual en línea, así que ya más o menos sabía como manejarlo, entonces en este aspecto yo no estoy tan pesimista respecto a la educación virtual, hay desafíos pero yo creo que en cierta forma se está tratando de llevar adelante para que no se paren las universidades y los niños no se queden sin pasar clases. Yo creo que hasta ahora estoy tranquilo, tampoco estoy pesimista, más bien soy optimista, espero que más bien con las nuevas tecnologías y con las nuevas herramientas que tenemos espero que mis estudiantes estén aprendiendo más, también teniendo más oportunidades que nosotros no tuvimos.

**PAOLA:** Ya hablando de las herramientas virtuales, se ha visto que estas herramientas pueden ser utilizadas de distintas formas, por ejemplo: Como medio de administración, creación, instrucción, colaboración, evaluación ¿De qué manera usted utiliza estas herramientas virtuales?

**LIC. CONDE:** Comunicación, Zoom, Whatsap para asignar, evaluar, para dar retroalimentación, lo interesante es que gracias a estas herramientas en cierta forma el trabajo en aula se puede realizar de forma virtual, claro que requiere acostumbrarse pues, es un poco más moroso de manejar al inicio pero en cierta forma se puede mantener la enseñanza, la retroalimentación a los estudiantes comunicándonos, básicamente hemos llevado el aula a la virtualidad yo creo.

**PAOLA:** ¿Y cómo está la interacción entre el docente y el estudiante? ¿Será que tal vez haciendo una comparación ahora hay más interacción que en las clases presenciales? ¿Cuál es su punto de vista?

**LIC. CONDE:** En cierta forma sí hay más interacción, ya que tenemos que estar conectados casi todo el día, usualmente antes era la clase, terminabas y listo, tal vez uno que otro mensaje en un grupo de Whatsapp. En cambio ahora tal vez hay estudiantes que en la tarde, fuera del horario de clases, se comunican conmigo, me consultan, entonces yo diría que hay más comunicación en ese aspecto; no sé si se relaciona pero respecto a la participación viene siempre de los estudiantes, yo creo eso porque por más que los tengas en el aula, hay estudiantes que no van a estar propensos a participar, a abrirse del todo, la cuestión es que ahora en la virtualidad la comunicación y la participación exige más a los estudiantes porque en la presencialidad el estudiante se veía más forzado a participar, en cambio ahora el estudiante es el que tendría que tomar la iniciativa también, no esperar siempre que el docente esté obligando, entonces yo creería que hay más comunicación y también eso se refleja en la responsabilidad que el estudiante tiene al llevar a cabo su aprendizaje, yo creo que eso resalta la virtualidad, el estudiante tiene que llevar, guiar su aprendizaje, esto también se refleja en las nuevas tendencias de educación: La autonomía, el autoaprendizaje, el autodescubrimiento.

**PAOLA:** ¿Usted tiene la intención de continuar utilizando estas herramientas y plataformas virtuales en un futuro?

**LIC. CONDE:** Sí, especialmente los recursos que nos da, la forma de dar tareas incluso, que ya no es como antes en un papel o en cuadernos, incluso para hacer practicar a los estudiantes, ya hay recursos audiovisuales, hay la forma de verlo más como lo llaman la Gamificación, o sea volverlo más didáctico y eso llama también a los estudiantes, incluso en ciertas herramientas facilitan también, por ejemplo: Puedo darles Quizes o Google Forms pues es más interactivo para los estudiantes y para mí también porque ya los estudiantes tienen ahí su retroalimentación y por lo menos trato de hacerles dar cuenta que guíen su aprendizaje, de que reflexionen, entonces da más facilidades en cierta forma, claro que los estudiantes tienen que aprender a manejar, familiarizarse. Yo creo que la mayoría ya está familiarizada con estas herramientas incluso con la tecnología en las clases, así que sí, yo voy a seguir utilizando, he creado mis propios materiales también, así que en vista a eso, voy a seguir usando, especialmente para reforzar, para asignar actividades, para que no sea muy monótono como sólo hoja de papel o apuntes.

**PAOLA:** ¿Usted se siente motivado por aprender más a cerca de la enseñanza virtual?

**LIC. CONDE:** Sí, especialmente han salido nuevos libros y ya es parte de la educación del siglo veinti uno, yo diría que después de esta pandemia, si las instituciones no van a querer quedar obsoletas, van a tener que tomar en cuenta la virtualidad o el uso de herramientas digitales porque ya nada puede ser como antes, la mayoría de las personas se ha dado cuenta que se puede aprender, ahora si bien o mal eso es algo que varía de acuerdo a la persona pero si se puede dar la forma, si se puede dar actividades también, así que sí, yo voy a seguir usando, voy a informarme más ya que nos han dado capacitaciones, nos han hablado de nuevas teorías, de nuevos planes de clase muy interesantes que los he ido aplicando, incluso pueden motivar más a los estudiantes, incluso a mí me hubiese gustado aprender con más recursos, con más herramientas. Así que sí, yo voy a seguir utilizando.

**PAOLA:** Bueno, muchas gracias por su tiempo Licenciado, será hasta otra ocasión. Hasta luego Licenciado.

**LIC. CONDE:** Hasta luego.

## **ENTREVISTA 6**

**LICENCIADO JOSE LUIS TERAN SANCHEZ**

**DURACION: 17:46 minutos**

**FECHA DE REALIZACION: 02/12/2021**

**PAOLA:** Muy buenas noches Licenciado, gracias por acceder a esta entrevista a cerca de la pandemia y de las consecuencias que ha traído, en específico, en la educación que se ha visto perjudicada de alguna manera pero con grandes brechas que se han abierto debido al internet. Vamos a ingresar al tema de las clases virtuales, quisiera consultarle licenciado: Usted como docente de la universidad Franz Tamayo, ¿Cómo se siente con su rol de tutor en las clases en línea?

**LIC. TERAN:** Me siento cómodo en el sentido de que por lo menos para el aprendizaje del idioma inglés la tecnología favorece mucho al tema de la comunicación porque como estamos enseñando un idioma y la idea es que los estudiantes se comuniquen, gran parte de estas nuevas aplicaciones que han aparecido: las plataformas, los juegos, hay una gama increíble de muchas, cientos de aplicaciones que se pueden utilizar como recursos de aula, ayudan mucho y efectivizan el tema del aprendizaje del idioma y además que al solamente la interacción del estudiante y del docente través de esta máquina que provoca esta interacción, al estudiante no le queda otra que poner atención a la clase, o sea que sí o sí tiene que poner atención a lo que está viendo en la pantalla, yo decía que en una clase presencial hay mucha interferencia de los mismos estudiantes, entre ellos empiezan a hablar de una y otra cosa, pero cuando uno está en línea, el estudiante sí está conectado en ese momento, si está o no está atendiendo, normalmente en este tipo de tecnología por lo menos en la UNIFRANZ es obligatorio que dejemos la clase grabada en la plataforma del estudiante, cosa de que el estudiante en su tiempo libre pueda ingresar, revisar el video y hacer el trabajo de manera asincrónica, incluso así su única manera de aprender sigue siendo la computadora, ahora cuando la facilitación se la puede dar de manera más didáctica a través de los recursos que existen hoy en día, desde mi perspectiva el aprendizaje a partir de tecnologías E-learning, por lo menos para el aprendizaje del idioma, en una plataforma bien armada, obviamente blended, o sea que sea sincrónico y asincrónico, efectiviza de manera dramática el aprendizaje del estudiante. Por ejemplo: me tocó ser estudiante en una Universidad Pública, en la UMSA como tal, pero el tipo de clase que se da en una universidad como la UNIFRANZ, donde utiliza todos los recursos, toda la gama de recursos de enseñanza de idioma digamos, tecnológicamente hablando (TICS),

aplicaciones, todo eso, es fuerte el cambio, hablando por ejemplo de la aplicación Quizlet, el Podcast, mis estudiantes deben crear un Podcast por clase, ellos utilizan por ejemplo el Canvas, incluso del mismo Office van creando su material y luego van creando sus propios videos en clase y utilizan aplicaciones como Zoom u otras aplicaciones con las que pueden grabarse o cosas así, pero eso en la UMSA no lo he visto, por lo menos en las clases que yo pasaba como estudiante, incluso en algunos casos era a través de una llamada por Whatsapp o por Telegram. Personalmente yo me siento cómodo con la enseñanza de E- learning.

**PAOLA:** Entonces usted está diciendo que ha tomado bastantes cursos de capacitación.

**LIC. TERAN:** Sí, varios por mi cuenta, no son cursos certificados, son el tiempo que le he invertido a aprender a manejar porque uno tiene que dominar estas aplicaciones, ha sido mucho, además en la UNIFRANZ, desde antes que comenzara la pandemia, un año antes.. Ya hemos recibido por lo menos unos tres o cuatro Bootcamps, que son seminarios extensos de capacitación para el manejo de este tipo de tecnologías y cada vez que comenzamos un semestre siempre hay un Bootcamp en donde nos enseñan nuevas técnicas y además que es obligatorio, en la UNIFRANZ si un docente no aplica lo que nos enseñan, simplemente nos despiden, entonces sí o sí tenemos que utilizar. Hemos recibido mucha capacitación en ese campo.

**PAOLA:** Como usted debe saber, estas herramientas pueden ser utilizadas de distintas formas, por ejemplo: Como medio de administración, creación, instrucción, colaboración, interacción, evaluación ¿De qué manera usted utiliza estas herramientas virtuales?

**LIC. TERAN:** Sobre todo para la interacción de los estudiantes en clase, desde la perspectiva del aprendizaje de un idioma que es la interacción con conversaciones en diferentes niveles: entre pares, entre grupos, etc. Que es lo que se puede hacer con Zoom y con Whatsapp y con Telegram combinando. Yo he encontrado la verdad más éxito en la combinación de varias aplicaciones al mismo tiempo. Por ejemplo: a inicios de la pandemia yo hacia mi reunión con Meet extendida, organizaba la reunión por Zoom, creando presentaciones con Canvas, los estudiantes están acostumbrados a crear su presentación y luego hablar de su presentación y lo graban y todo éso. La mayoría tiene problemas de conexión, problemas de memoria pues su teléfono no puede tener muchas aplicaciones funcionando al mismo tiempo, el objetivo es usar aplicaciones prácticas, por ejemplo: La combinación de Zoom con Whatsapp o Zoom combinado con Google Meet y Duolingo, les ayuda mucho. Sobre la interacción estudiante-docente, yo diría que es igual, la participación es la misma, pero la

diferencia es el tipo de participación porque la participación en clase presencial es en vivo, en tiempo real; pero la mayoría de las actividades on line no se hace en tiempo real, gran parte de las actividades se hace de manera asincrónica, se la deja asignada y el estudiante empieza a trabajar y luego la sesión sincrónica sólo es para preguntas y respuestas o ciertas prácticas que sean cruciales. Se puede decir que la participación en clases on line es mejor, como no tienen de otra, entonces sí o sí tienen que enfocarse.

**PAOLA:** Quisiera consultarle: ¿Usted tiene la intención de continuar utilizando estas herramientas y plataformas virtuales en un futuro?

**LIC. TERAN:** Sí, obvio porque estas plataformas le han dado orden a la educación porque por ejemplo antes cuando la educación era presencial muy pocos docentes de un staff, uno o tal vez dos, utilizaban plataformas para la enseñanza presencial por que antes no era obligatorio, era labor extra del docente, y era premiado con un punto en su desarrollo docente, pero hoy en día éso ya se ha estandarizado, por ejemplo: En la UNIFRANZ todo lo hacemos por Moodle. Eso a mí me encanta porque Moodle te lo estandariza todo, tú lo tienes ahí todo fríamente calculado, quien te ha presentado, a qué hora te ha presentado y tú tienes el control de todo lo que te ha presentado, la valoración de notas es mucho más rápida. Hoy en día ya se habla de la Educación Híbrida, para el dos mil veinti dos que creo que se va a dar en todas las instituciones, es la combinación de lo virtual y lo presencial y será algo muy interesante.

**PAOLA:** Yo creo que está de sobra preguntarle cuán motivado se siente por aprender más a cerca de la enseñanza virtual, pues lo veo bastante animado Licenciado.

**LIC. TERAN:** Sí, definitivamente, me encanta enseñar y me gusta la tecnología, yo creo que la enseñanza como todo evoluciona porque es parte de la cultura y la cultura evoluciona siempre y la cultura actual es la cultura digital, yo estoy súper motivado con el tema de poder aprender más sobre virtualidad, sobre este tipo de educación que es además el futuro, yo creo que el que no se adapta a este contexto educativo, se extingue.

**PAOLA:** Así es. Bueno, muchas gracias por su tiempo y por acceder a esta entrevista.

Sera hasta otra oportunidad, buenas noches.

**LIC. TERAN:** Claro que sí. Muy buenas noches.