

The Comparative Socio-Educational Effect of the Use of E-Learning Vs Face-To-Face Education as a Proposal within the Teaching-Learning Processes in Higher Education



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SUMMARY: In the contextual framework of Information and Communication Technologies (ICT) in the educational field, this research was carried out on E-learning education and face-to-face education. Education is currently developed within a framework of innovation and transformation, so ICTs have been incorporated to promote access and quality of teaching-learning processes. Face-to-face education E-learning is a modality that supports flexible teaching and learning methods. Even so, at the same time, they present advantages and disadvantages that facilitate or hinder the tools for educational tasks. This research article's main objective is to know the opinion of the Delfin 2019 Centro Universitario de la Costa program students about e-learning and face-to-face education to compare both modalities later. To develop this work, an instrument was created as a questionnaire from which the quantitative analysis and conclusions were obtained. An answer was given to each of the research questions, and the main question presented qualitative moments; due to the above, it was mixed.

KEYWORDS: E-learning, face-to-face education, higher education.

INTRODUCTION

One of the main concerns of the higher education system in Mexico is to improve each level of education in terms of quality and coverage, especially undergraduate programs, which is one of the most significant educational lags with which This educational system counts. One of the strategies adopted to improve coverage levels, in particular, has been, since the eighties of the 20th century, to promote non-traditional education programs such as distance and virtual modalities. Despite the above, this type of non-traditional education has often been questioned in terms of quality because it requires an additional follow-up and monitoring effort from the institution, a robust ICT infrastructure, but in very Particular is to keep the student out of the environment of his traditional educational system, which in a certain way can affect his academic performance about those who are in the virtual or distance system. The purpose of this research is to compare higher education students' school performance in face-to-face classes that are taught conventionally to those subjects that have taken them virtually for academic reasons. With the development of this research, in addition to the above, the quality of the traditional or face-to-face educational system as opposed to the non-traditional one is also sought. The central idea was to determine the existence or not of statistically significant differences between the modalities of traditional and non-traditional professional education (EAD and virtual), in terms of quality, specifically at the level of academic performance of the students.

This research work was carried out at the Centro Universitario de la Costa of the University of Guadalajara and in a very particular way to the students of the XXII Summer of Scientific and Technological Research of the Pacific of the Delfin Program as an object of study and that the previous educational institution hosted the program above, to which they answered a questionnaire or instrument in which a diagnosis was made on the level of educational efficiency of face-to-face education about distance education, taking as reference the courses are taken conventionally (face-to-face) compared to those who use a platform (e-learning) to take the subject virtually or remotely. These students have a population of 257 who belong to different universities in the country and abroad and are enrolled in the Delfin 2019 program.

BACKGROUND

In this research, a diagnosis was made about the differences in the training modalities of higher education students, who take courses in person and can take classes through learning platforms or e-learning with the same quality as if they did it in person (Wu, 2022).

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When analyzing the academic performance results of students who have chosen one of the two training modalities, reviewing the motivations that lead them to take the courses in their various modalities is necessary. For this, higher education institutions must have the ICT infrastructure, as well as good Internet bandwidth, In addition to having technical staff and teachers trained in this modality of studies so that they can virtually guide each of the activities that allow students to manage and acquire the skills according to the postulates of the study program (Montebello, 2020).

In this same sense, it is established that the use and application of technologies in this educational field have transformed each interaction process between the teacher and student-student into an interactive coming and going that allows the democratization of learning. , while the various technological means allow this modality through connectivity, as well as the integration and transparency of the information in which it is transmitted and enables the sharing of all kinds of ideas, knowledge, research proposals, doubts, and concerns that are they emerge from the most diverse points of view of the various actors involved (De Kerckhove, 2006).

“The emotional states and experiences that a person who is involved in a distance education process goes through have been rigorously analyzed in this research; since it is well known that emotions and interpersonal relationships have a significant impact on the success or failure of a person, and during professional or academic experiences” (Hentea, Shea & Pennington, 2003).

Emotional involvement concerns the interpersonal impact that students and teachers experience when involved in a distance learning modality. Distance education, based on learning techniques outside the classroom, turns the teacher into a facilitator; the student is a proactive researcher responsible for his learning. This research has two implications: emotional and rational, detailed below (Kokkinou, 2021).

Based on the above and the imminent demand to study a degree, and also as the spaces offered by the University of Guadalajara are currently insufficient to accommodate the entire population, it is the leading cause to investigate the open and distance education provided by the University of Guadalajara, and it is precise that the Virtual University System (SUV) is an unbeatable alternative for the problem mentioned above, all of this demonstrating the great versatility that this system offers by being able to meet the demands of all layers social, of all the populations of the state of Jalisco since it has a state coverage (Khan, 2021).

Due to the above, the University of Guadalajara proposes the use of this modality as an educational strategy so that students can complete a degree virtually in its entirety, or else the institution has the capacity and qualified teaching staff to combine and apply in each of its subjects, existing open platforms on various Internet sites, an example of this is the Moodle platform where teachers can program in a mixed modality (face-to-face and virtual) or virtual, those courses that, due to their programmatic nature, authorize the academic and the respective head of department, to carry it out in this modality in the calendar that is allowed (Youde, 2020).

The general objective of this study is focused on diagnosing face-to-face courses about virtual classes and their efficiency level. Addressing this, various learning strategies in each teaching-learning process occur within the classroom (virtual or face-to-face) in the different subjects of the academic units that students take in Higher Education Institutions (Geberth, 2023).

PROBLEM STATEMENT

The higher educational level aims to comprehensively train citizens through processes and teaching approaches due to the current technological needs and opportunities. In many universities, it has been proposed that students carry out their studies in different modalities: face-to-face education, where students regularly attend classes and are in face-to-face contact, interacting with educational actors; and e-learning, which consists of courses, either in short periods or even most of the academic program, on virtual platforms (Papadakis, 2022).

Of the above, on many occasions, to make the student process more comfortable, education through the Internet is chosen, thus believing that they can have consistent and efficient knowledge in carrying out various tasks virtually, but what is not analyzed is The fact of not having that link or physical relationship between teacher-student and generally learning, by comparison, is notorious, since that union between the aforementioned is vital and above all, fundamental.

This case has already been studied, and there are various opinions from people with experience in both virtual education (E-learning) and face-to-face education, the latter being more recommended if significant learning is required.

A hostile attitude is detected on the part of university students towards the e-learning modality; they prefer face-to-face education, indicating that they consider that they learn better this way and that working on platforms is difficult for them due to times and due to the culture of self-study since They are not used to working alone.

This research work was carried out at the Centro Universitario de la Costa (CUC) of the University of Guadalajara (UDG) with 257 students from the Inter-Institutional Program for the Strengthening of Research and Postgraduate Studies in the Pacific (Dolphin Program) in its edition XXIV (2019). The students above will be compared to determine the modalities' effect.

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General objective

Carry out a diagnosis of how e-learning courses (distance) have impacted relation to face-to-face classes and their effectiveness in each of the teaching-learning processes.

Specific objectives

- Carry out an analysis regarding the practical knowledge of e-learning courses (at a distance) compared to face-to-face courses.
- Analyze the effectiveness of e-learning courses (distance) about face-to-face courses.
- Establish a comparison regarding the effectiveness in each of the teaching-learning processes of e-learning courses (distance) about face-to-face courses.

Research premise (hypothesis)

Higher education students consider that e-learning courses have the same academic effectiveness as those taken on-site and do not affect their academic performance.

Main question

How much have e-learning (distance) courses impacted face-to-face courses and their effectiveness in each teaching-learning process?

Secondary questions

- What is students' practical knowledge in e-learning (distance) courses compared to face-to-face courses?
- How practical are e-learning courses (distance) about face-to-face classes?
- What factors make it a good option for the student to take an e-learning course (distance) about face-to-face classes?
- What are the effects on students with the use of modalities in each of the teaching-learning processes?

Justification

This article is developed for the following reasons. First, to propose that Virtual Education or E-learning is an alternative to Face-to-Face Education, recognizing the millennial trajectory of classroom training and that its replacement should be suggested. Second, confirm that Virtual Education effectively maximizes key processes within Higher Education, specifically teaching and learning based on good practices and competency-based training. Third, to promote the generation of knowledge from the research carried out with students of the Dolphin Program at the University of Guadalajara, at the Centro Universitario de la Costa in the city of Puerto Vallarta, and fourth, to provide theoretical and practical knowledge on cutting-edge topics such as Face-to-Face Education, E-learning and Higher Education.

The students who benefited from the research will be able to use the results of the comparative study on generic competencies in face-to-face and virtual modalities as a support to strengthen the position of E-learning as a valid mechanism for university education, since generic competencies, according to the study, achieve favorable results with the modality above. In the same way, the beneficiaries of the study will be able to support the use of good educational practices with ICT as part of the formal university curriculum in virtual mode since it has been demonstrated that these practices are effective for teaching and learning.

THEORETICAL FRAMEWORK

Definition of e-learning

To understand the terms that are mentioned, it is necessary to review what has been done regarding the object of study; in the case of e-learning, Area, and Adell (2009) indicate that:

“It is a teaching-learning modality that consists of designing, implementing and evaluating a course or training plan developed through computer networks, an education or training offered to individuals who are geographically dispersed or separated or who interact in Deferred times of the teacher using computer and telecommunications resources.”

Likewise, García (2005) defines it as:

“Non-face training that, through technological platforms, enables and makes access and time in the teaching-learning process more flexible, adapting them to the abilities, needs, and availability of each student, in addition to guaranteeing collaborative learning environments through the use of synchronous and asynchronous communication tools, enhancing, in short, the management process based on competencies.”

Azcorra et al. (2001) understand tele-education or e-learning as "a type of distance learning with an open, interactive and flexible nature that is developed through the new information and communication technologies, taking advantage above all of the benefits offered by the Internet."

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On the other hand, Beltrán (2003) pointed out how e-learning “refers to the development of distance training reinforced by the educational possibilities that ICTs have.”

However, Hernández (2006) points out "the complex conception of e-learning that encompasses those applications and services that, based on ICT, are aimed at facilitating the Teaching-Learning process.”

E-learning is mentioned by Beltrán (2003) and Hernández (2006) as a way to facilitate education and Teaching-Learning processes to save space and time through ICT, in addition to the interaction of geographically dispersed subjects.

Classroom education

On the other hand, face-to-face education is the most common among the study modalities of universities, according to Salinas (2004):

"It is the one that is accompanied by a complex context that, informally, reinforces the interest of the student for the learning activity that he displays (the classmates, the exchange of notes and points of view, the team review, the extra activities), education and contact with teachers.”

Arias (2013) mentions that "the teaching-learning process is based on direct interaction between student and teacher, to promote meaningful learning, starting from real work situations through a theoretical-practical didactic strategy.”

Meanwhile, Martínez (2017) points out that face-to-face education or training through mouth-to-mouth communication has existed since Homo Sapiens began to discern. It has constituted the base of the transmission of knowledge for centuries; fundamentally, it contributes to the enriching fact of socializing contact, the bodily expression of sensations, desires, and emotions, impossible to emulate from a distance.

Face-to-face education may be the modality for most students, from basic to higher level, since the interaction of educational actors has always distinguished the teaching and learning paradigm. As well mentioned, higher education is the one that concerns this object of study, but it is necessary to conceptualize higher education to have a vision of it (Asad, 2022), (Bean, 2023), (Nuriddin, 2024).

Higher education

Majó (2002) considers that:

“Education has as its objective the formation of capacities and attitudes of individuals for their integration into society as beings capable of regulating the status quo. At the same time, it can transform social reality to pursue the values in force at a given historical moment. Therefore, the task of higher education is the training of competent professionals; individuals who solve social problems creatively, that is, in an innovative, efficient, and effective way.”

The Secretary of Public Education (SEP, 2008) mentions that “higher education is that which is given after the baccalaureate or equivalent (higher secondary education). There are different levels within it, and in the same way, different types of institutions teach it”.

The SEP (2010) also states that it is “the type of education in which professionals are trained in all branches of knowledge. Requires previous high school studies or its equivalent. It includes the levels of superior technician, associates professional, bachelor's degree, specialty, master's degree, and doctorate”.

Guerrero (2012) points out that the task of higher education is “the training of competent professionals, individuals who creatively solve, that is, in an innovative, efficient and effective way, social problems.”

Information and communication technologies

Communication is how, since the first humans, it has been possible to share feelings, knowledge, and thoughts; it is the fundamental element to transmitting a message. Communicating implies having three essential elements: sender, receiver, and channel (Rosak-Szyrocka, 2024).

This is how, from generation to generation, the codes have been inherited. Still, globalization brought with it changes in the expression of human beings, for which reason and thanks to the inventions of modern man, the structure changed. There are already other inputs in the communication process, such as codes, and these are framed in computer systems, which bring people closer and make life more accessible through the use of technological devices; In this way, ICTs are generated, they allow the sending of information through computer communication channels, over long distances, allowing contact between peers. In this sense, Sierra et al. (2016) argue that, in ICT, messages are instructions and data that are transmitted between sender and receiver (users, through a digital channel (HARDWARE) established by a code (SOFTWARE) within a context established by international conventions).

In consideration of the above, it can be defined that ICTs are immersed at all levels of contemporary society, such as multinational corporations, SMEs, governments, administrations, lower and higher education centers, organizations, professionals, and independent workers, allowing make possible the connection between them at any time and place (Arinushkina, 2023).

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In addition, a series of characteristics are observed that are described as representative of ICT. According to Cabero (1998), it is established as immateriality, interactivity, interconnection, instantaneousness, digitalization, more significant influence on processes than on products, penetration in all sectors, innovation, and the trend towards automation and diversity.

In the same way, the notion of technological paradigm is considered, emphasizing its open, adaptable, and integrating nature, whose characteristics of the technical model are:

“Information is its raw material: Its penetration capacity occurs in all social spheres. The logic of interconnection in the technological system is the morphology of the network, which provides structure and flexibility to the system. Its flexibility and ability to be reconfigured, allowing organizational fluidity: Convergence and integration of specific technologies in a general system” (Castells, 2008).

Teaching learning processes

It remains evident that improving teaching processes and learning within the classroom results in educational quality (SEP, 2010); it is a term that has not been fully understood or widely understood. What is explicitly mentioned, since from the National Agreement for the Modernization of Basic Education in the nineties, there is no clear and convincing idea of this aspect, since each one attributes a different meaning to it and worse still, it is said that we want educational quality when it is not known what the meaning is attributed to this term (Chakraborty, 2024).

This policy continues without concretely knowing alluded to, without being aware of what this conception surrounds education. The deficiencies of the State itself in its actions to achieve the objectives it sets in its educational policies are evident (SEP, 2008). Consequently, it is necessary to reconsider the governance of the educational system to obtain optimal results attached to the quality of education (Washburn, 2024).

In the same way, it is essential to emphasize that the actions must be marked around what educational quality is and what the minimum mechanisms essential to achieve the Alliance for Educational Quality (ACE) in Mexico be the take-off platform it allows to start a vertiginous series of events of the transcendental impact that results in a series of strengths that facilitate the formulation of national projects, where the processes of governability and governance facilitate educational quality in the achievement of objectives that impact the economic and social development of the country (Sousa, 2023).

METHODOLOGY

Measure, evaluate, and collect data on various variables, aspects, dimensions, or components of the phenomenon to be investigated. The methodological design of this research is descriptive and cross-sectional (Martínez, 2008). First, it seeks to specify the properties, characteristics, and profiles of the subjects who undergo analysis.

Therefore, the descriptive study selects a series of questions and measures or collects information on each to describe what is investigated. A descriptive investigation aims to measure or collect information independently or jointly and offers the possibility of making predictions (Hernández, 2006). In this sense, it is intended to account for the comparative effect of the use of E-learning vs. face-to-face education in the education of the students of the Delfin program.

The relationships that they establish regarding the use of the two modalities, both face-to-face and mixed, of the courses that the students of the XXIV Summer of Scientific and Technological Research of the Pacific of the Dolphin Program 2019 and that both these are effective by making a comparison of each of the teaching-learning processes and that they respond effectively and efficiently to the challenges that it gives them, particularly online courses about face-to-face courses, supported by academics trained and prepared in the management of e-learning learning platforms. In addition, the competencies that the teacher must have in terms of management and evaluation by competencies that the program marks when carrying it out through the use of the platform, in which students develop activities that pay each one, must be considered. Of competencies significantly in higher education institutions.

Instruments

The data collection instrument used was a questionnaire to collect the perception of students regarding the comparative effect of the use of online courses (e-learning) on the courses they have taken in person, which makes a comparison and level of efficiency of both modalities. Using this data recovery technique, 42 items were designed, divided into five sections: 1. General student data; 2. The practical knowledge of the students of the e-learning courses (at a distance) compared to the face-to-face courses; 3. Effectiveness of e-learning courses (distance) about face-to-face courses; 4. Factors that make it a good option for the student to take an e-learning course (distance) about face-to-face courses and 5. Effects on students with the use of modalities in each teaching process learning.

Analysis and discussion of results

This section presents the analysis of the data obtained in this research work. Without a doubt, it represents the fundamental activity to determine the achievement of the objectives set at the beginning of this process and to analyze in detail the information collected.

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Participants

The sample size was 100 students who participated in the program of the XXIV Summer of Scientific and Technological Research of the Pacific of the Delfin Program, from a population of 257 students who carried it out from June 18 to August 3. of 2019, headquarters at the University Center of the Coast belonging to the University of Guadalajara, which is located in the Municipality of Puerto Vallarta, Jalisco. To which the questionnaire or instrument was applied to be able to collect data that supports this research work.

This questionnaire is aimed at students; as mentioned above, it seeks to establish through this instrument the comparative effect of the use of online courses (e-learning) on the courses they have taken in person, in that a comparison and level of efficiency of both modalities is made. It should be noted that the students themselves evaluated the relevance and quality of the courses they have already taken in their respective academic units of the Higher Education Institutions to which they belong.

RESULTS AND DISCUSSION

As previously mentioned, the data collection instrument was a questionnaire to gather students' perceptions regarding the comparative effect of online courses (e-learning) on the courses they have taken in person. Through this data recovery technique, 42 items were designed and distributed in the five sections already mentioned above.

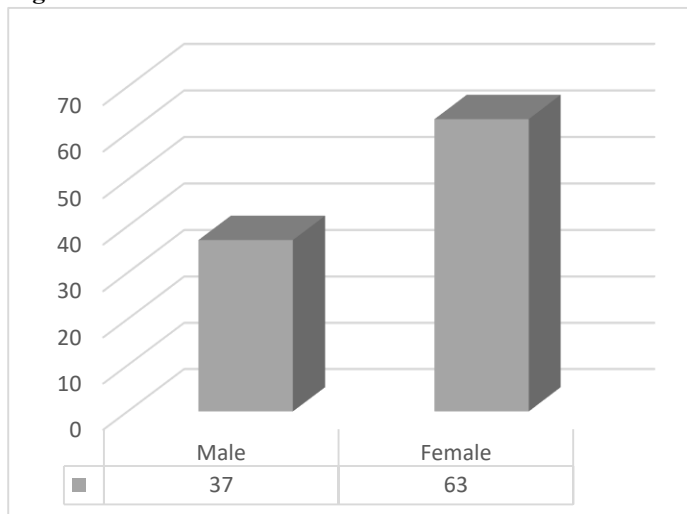
I. General data

Table 1. Student sex

Male	37
Female	63
TOTAL	100

Source: Self-made

Figure 1: Sex of students



Source: Self-made

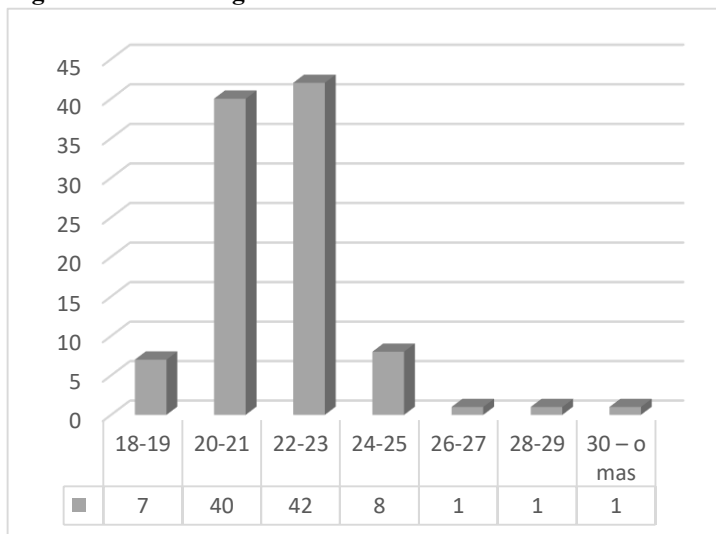
According to the previous graph, most of the students, 63% of them are female students and 37% are male.

Table 2. Student age

18-19	7
20-21	40
22-23	42
24-25	8
26-27	1
28-29	1
30 – o mas	1
TOTAL	100

Source: Self-made

Figure 2: Student Age



Source: Self-made

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About the age of the students, they present the following distribution: 82% of them are between 20 and 22 years old, which represents a natural age for the degree of study, and the rest, which is 18%, are outside this age. age range

II. Students' practical knowledge of e-learning (distance) courses compared to face-to-face courses.

1. What platforms do you know for online subject work?

Table 3. Knowledge about learning platforms

Platform	Quite	More or less	Bit	Nothing	Totals
Classroom	38	13	16	33	100
Moodle	33	25	18	24	100
Blackboard	29	18	16	37	100
Duolingo	37	28	18	17	100
Hoot course	4	15	20	61	100

Source: Self-made

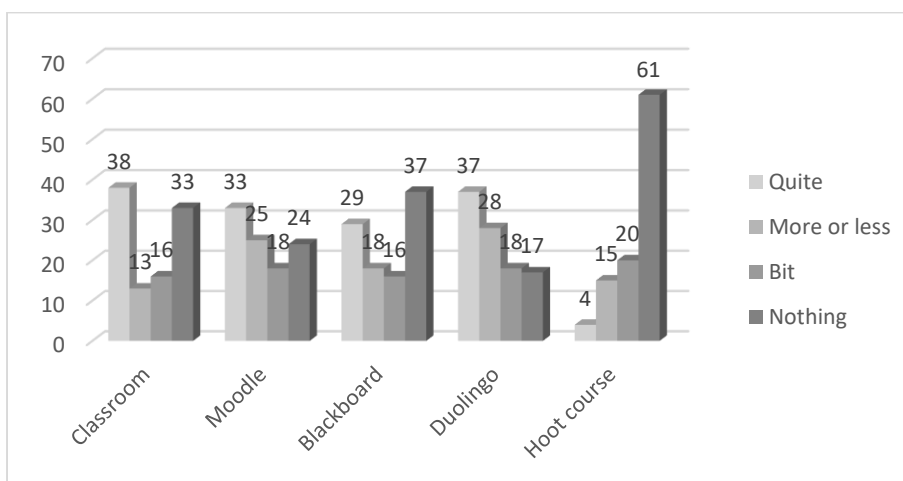


Figure 3: Knowledge about learning platforms

Source: Self-made

Regarding knowledge of the platforms, the students answered that, yes, they are aware of them, since they do not represent a viable learning option for them, but according to the data collected in the following graphs, their uses demonstrate the opposite.

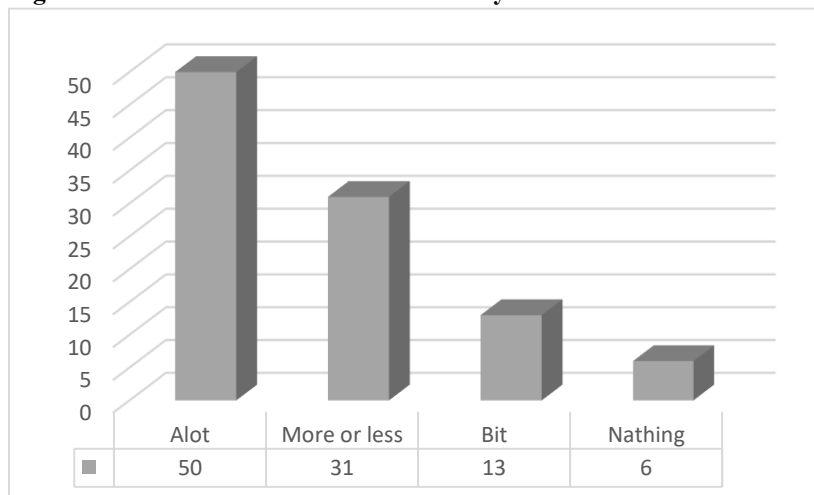
2. How much do you like working in person?

Table 4: Taste for the face-to-face modality

Alot	50
More or less	31
Bit	13
Nothing	6
TOTAL	100

Source: Self-made

Figure 4: Taste for the face-to-face modality

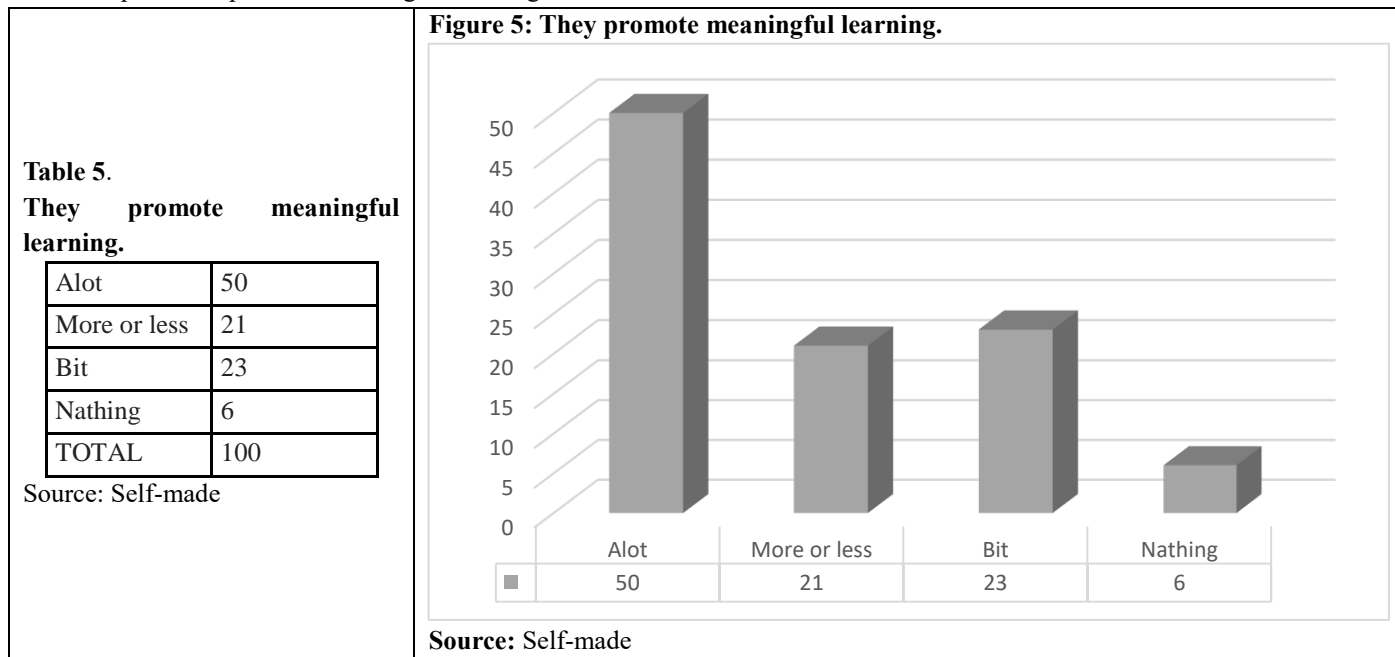


Source: Self-made

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About the previous graph, most of the students, 50%, responded that they liked the in-person modality, while the rest liked the virtual modality a little or not at all.

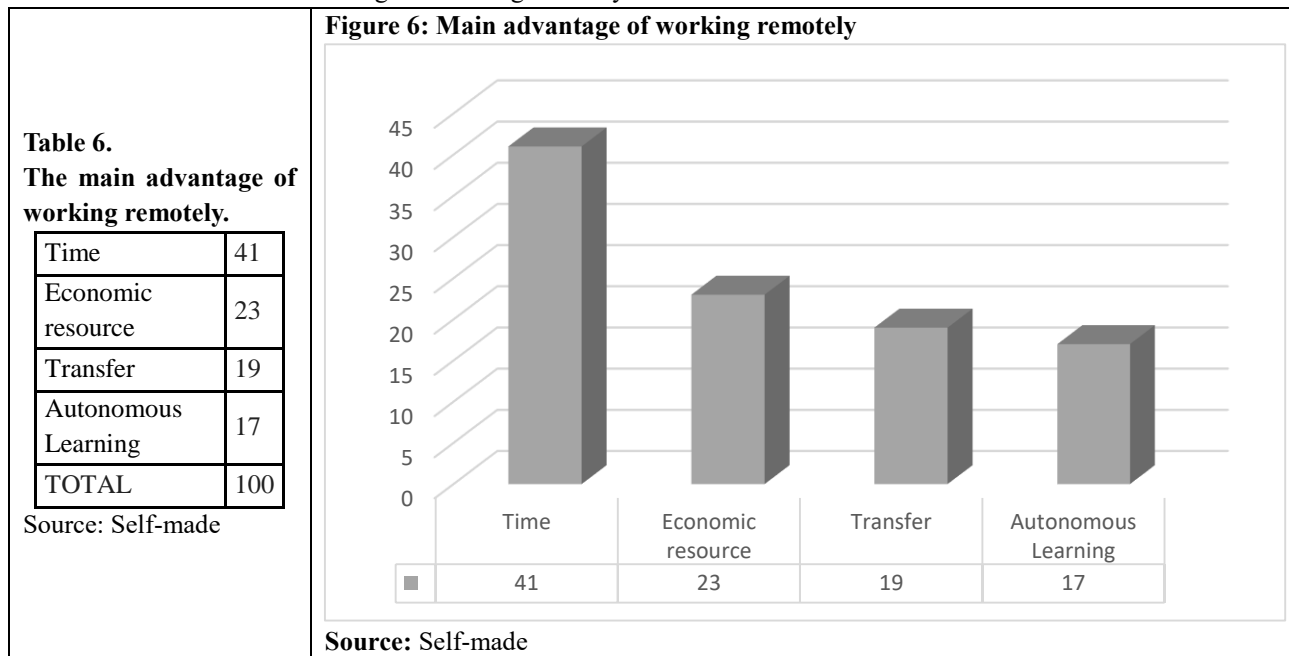
III. Work platforms promote meaningful learning:



Regarding the previous graph, most of the students, 50%, consider that the use of learning platforms can promote meaningful learning, while the rest consider that it can support them regularly, little or not at all.

IV. Factors that make it a good option for the student to take an e-learning (distance) course about face-to-face courses.

1. What is the main advantage of working remotely?



Students consider that the main advantage is time at 41%, financial resources at 23%, transportation at 19%, and autonomous learning at 17%.

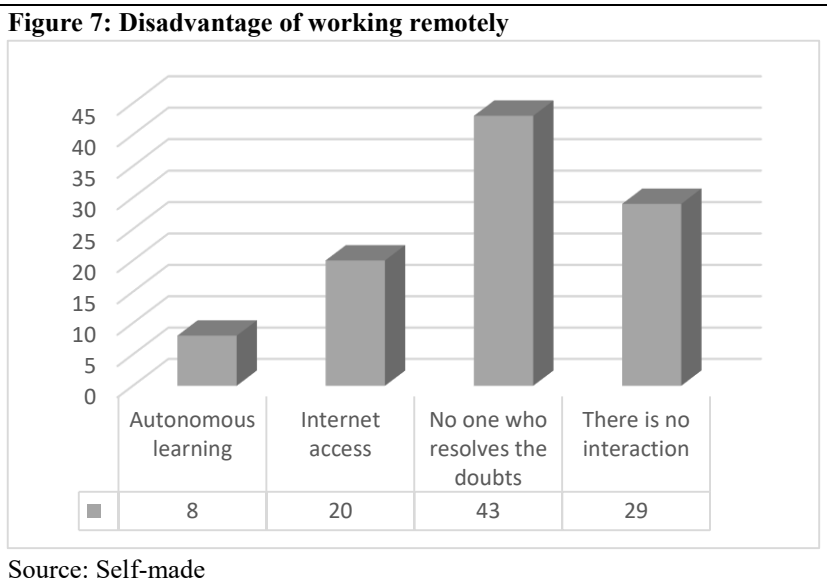
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2. What is the main disadvantage of working remotely?

Table 7. Disadvantage of working remotely

Autonomous learning	8
Internet access	20
No one resolves the doubts	43
There is no interaction	29
TOTAL	100

Source: Self-made



Students consider that the main disadvantage of studying remotely is that they do not have support regarding doubts that arise during the course from teachers with 43%, as well as 29% that there is no interaction, 20 % do not have internet access and 8% cannot work independently.

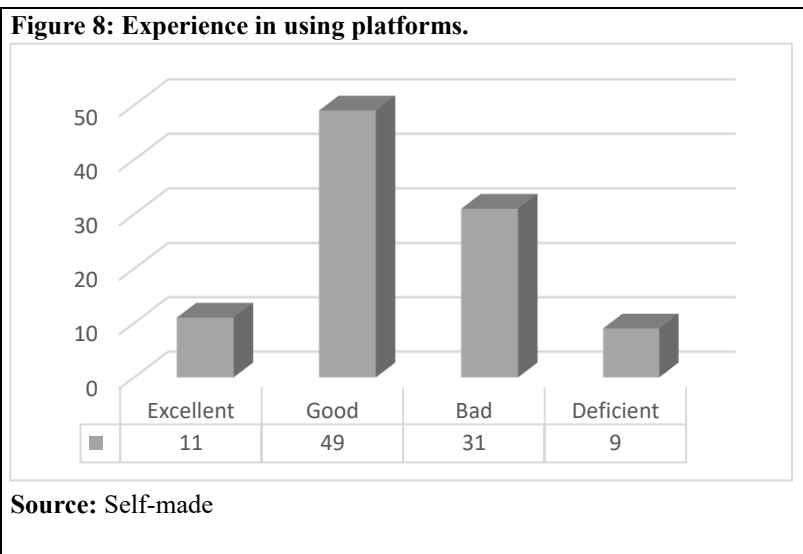
V. Effects on students with the use of modalities in each of the teaching-learning processes

1. Experience with the use of platforms

Table 8. Experience in using platforms.

Excellent	11
Good	49
Bad	31
Deficient	9
TOTAL	100

Source: Self-made



Regarding the experience that the students have about the use of the platforms, they responded as follows: 49% have good experience; 31% have regular experience; 11% have Excellent experience, and 9% have Poor experience.

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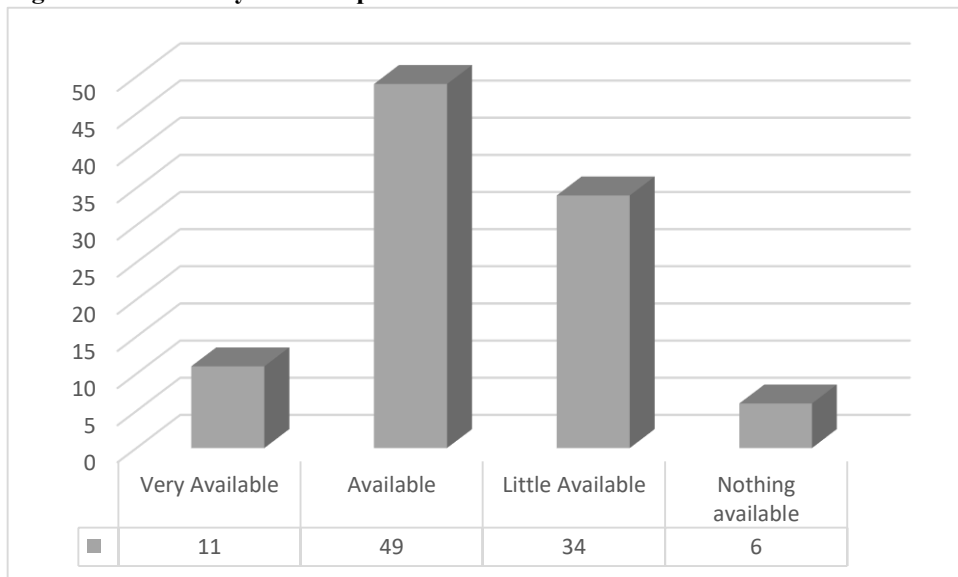
2. Availability to work on the platform again

Table 9. Availability in use of platforms

Muy Disponible	11
Disponible	49
Poco Disponible	34
Nada disponible	6
TOTAL	100

Source: Self-made

Figure 9: Availability in use of platforms



Source: Self-made

Regarding the availability that students have about the use of the platforms, they responded as follows: 49% have availability; 34% low availability; 11% very available, and 6% not at all available.

Answer to the main question

In this section, the main question was answered: How much have e-learning (distance) courses impacted face-to-face courses and their effectiveness in each teaching-learning process?

It is indisputable that ICTs will play a potentially important role in education's current and future direction in the coming years. However, multiple factors have influenced the fact that they have still had a low impact on the teaching-learning processes oriented towards training by teaching competencies at the higher level.

Teachers' role in education in any of its modalities and levels is evident. In this sense, it has been commented that it is essential that the teacher has training that allows him to face the complexity of education daily, and even more so if it is a matter of performing functions in front of school groups in the various subjects at the level superior. Given the conditions that precede this perspective, it is necessary to comment that one of the professional demands of both teachers and students is that they can develop skills and achieve the principles under which an improvement in the teaching-learning processes in each of the moments that occur in the classroom, in the various academic subjects taught by teachers.

It is evident, then, that from the established premise and the results obtained from the surveys applied to teachers, it can be said that this has been confirmed, since by itself ICTs have a motivating effect on students since it allows develop different skills that will serve you for life and generate learning permanently.

Due to those above, it is time to express the feelings of the teachers who expressed their perception in the survey carried out about the importance of the management and use of ICT by the teachers of the University of Guadalajara Campus Puerto Vallarta, University Center of the Costa in its different teaching-learning processes, as well as teacher training.

In addition, it should be added that the teacher must have the concern and, in a certain way, the obligation to know more and update himself, based on the need that allows him to achieve the objectives, as well as the vision, mission, and graduation profile that each one of them requires. Students at the end of their professional training within higher education can adapt to the productive world.

In addition, each of the projects that have been drawn up for this educational level must be consolidated, which requires essential continuous work, where efforts are aimed at consolidating a national project that impacts the social structure in the short term.

CONCLUSIONS

The rapid development of information and communication technology has generated changes in the teaching-learning process by introducing technological mediation in the distance and face-to-face modalities. Educational and business Institutions are using distance education, such as virtual learning, to train their staff. The methodologies are different, depending on the type of technology they have and the type of organizational culture they have.

Information and communication technologies designate, in turn, a set of innovations in the use of tools that allow a redefinition of the functioning of society. ICT can generate new opportunities for access to information, create capacities, improve productivity,

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promote development, and, ultimately, allow progress in creating equal options. The quality and how the contents are produced, transmitted, and perceived by people guarantee an actual use of ICT.

Regarding distance education, it must be considered that it is a technological system of bidirectional, multidirectional communication; it does not have borders in time; it occurs anywhere; it is the integration of various media in one (digital and technological platforms), and it has levels of moderation: synchronization and asynchrony, as different and complementary, it has virtual spaces, through networks and seeks meeting places such as the virtual classroom. Regarding the use of technologies, distance education uses them to fulfill teaching-learning objectives. Technologies are a means, not an end, in themselves.

For the development of distance education, e-learning, and virtual education, the following must be considered: time, place, space, interaction, technology, and self-control. In the first three aspects, the participant in this modality looks for the most opportune moment, place, and space appropriate to their reality, to carry out their learning activities and interact with teachers, classmates, and materials as often as they wish, for which they use the information and communication technologies that are within their reach and establish their control.

RECOMMENDATIONS

Distance education is a modality that has been developing for some time in the universities of Mexico and has taken a great boom in the Medical Universities. At the University of Guadalajara, this type of modality within the Virtual University System (SUV) proposes distance courses for the undergraduate and postgraduate areas, for which the authors of this article consider it necessary to update teachers and students about this topic.

Distance education is a technological system that allows student-teacher communication and vice versa, which is supported by didactic resources and tutorial advice to achieve correct individual and collaborative learning.

It is essential to know the theoretical bases that distance education supports to understand this model developed worldwide for years, considering that pedagogical design sustains this type of education beyond technology.

ICTs have fostered the development of distance education, providing tools that support this process. The possibility of using the chat, the forum for interpersonal communication, and the creation of online exercises are some advantages that ICTs promote and allow exchange and collaborative work as theoretical premises of the distance modality.

At present, learning networks are gaining momentum as a space that allows the interaction of individuals with common interests to share knowledge and ideas, encourage debate and group work, and influence the development of professional skills. It is an open space for interaction that allows you to share links and files. Teachers must prepare for this new space as a guide and companion in the process, a collaborator in constructing knowledge.

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