

# Innovation in the platform of the Distance Education System in the Academic Division of Economic-Administrative Sciences of the Universidad Juárez Autónoma De Tabasco.

Cristian Guadalupe Culebro Estrada Juárez Autonomous University of Tabasco, Mexico https://orcid.org/0000-0001-8070-1189 Cristi.gce@gmail.com

#### **Gladys Elena Mateos Gutierrez**

https://orcid.org/0000-0002-9089-6650 Gladys.mateos@ujat.mx Juárez Autonomous University of Tabasco, Mexico

## Dr. Aída Dinorah García Álvarez

Juárez Autonomous University of Tabasco, Mexico ORCID ID: https://orcid.org/0000-0002-2846-6924 adgaral@gmail.com

#### Resume

The results of the analysis carried out on the platform of the distance modality of the bachelor's degree in marketing of the Universidad Juárez Autónoma de Tabasco are shown, in order to identify the innovation opportunities presented by the platform of the distance education system, for what which was carried out an investigation focused on the students who use this technological tool; Applying surveys to the students of the degree in marketing and analyzing the results obtained, it is concluded that the design of the page can be improved in order to make it more accessible to higher education students.

Keywords: Distance education, Bachelor of Marketing, Academic Division of Administrative Economic Sciences, innovation.

#### Summary

The results of the analysis carried out on the platform of the distance modality of the degree in marketing of the Universidad Juárez Autónoma de Tabasco are shown, in order to identify the innovation opportunities presented by the platform of the distance education system, It has been made an investigation focused on students who use this technological tool; Applying surveys to the students of the degree in marketing and analyzing the results obtained, it is concluded that the design of the page can be improved in order to make it more accessible for students of higher education.

Keywords: Distance education, Bachelor of Marketing, Academic Division of Administrative Economic Sciences, innovation.

#### Introduction.

Over the years, new technologies have been introduced in the educational field to the point where it is essential to master the new teaching techniques that are being developed; We can see how students adapt with great ease to the use of technological tools, opening a possibility for the use of new learning methods that can be more effective and useful when applying in a practical way the knowledge acquired through theory.

"The development of technology impacts in such a way the ways of life of society, and therefore, it also affects education, which cannot be left out. Especially considering that new forms of communication have been created, new ways of accessing and producing knowledge. And this is so, since New Technologies exist and are everywhere. Closing our eyes in front of this or submitting ourselves passively to the demands of technology without questioning whether or not it contributes to a real improvement, will not allow us to have a broad, reflective vision that leads us to understand it in all its dimensions. "(Cooperberg, 2002)

The university student shows great acceptance of the use of information technologies (IT) applied in their higher education, position what In some universities, such as the Universidad Juárez Autónoma De Tabasco, there are study modalities via the internet, through which students are given the opportunity to take a subject in a nonface-to-face way, through a virtual classroom or platform (system of knowledge generation), allowing them a flexible schedule and easy access to it when they need it.



Young people currently live in a technological era, in which new information and communication technologies (ICT) play an important role, since they are constantly immersed in social networks and / or social media, that is, they feel identified with the electronic media and its form of interaction.

Due to the familiarization that students have with technological and electronic means, they have acquired an ability to evaluate and qualify the design of the different pages to which they have access, always observing the structure and accessibility, that is to say that it is easy and simple to understand.

With the constant evaluation by young people towards electronic media, they can easily identify the deficiencies found in the knowledge generation systems (platforms), as is the case presented in this article, in which 80 students of the degree in marketing of the Academic Division of Economic-Administrative Sciences, in order to identify the different characteristics to innovate of the platform of the distance modality of the Autonomous University of Tabasco.

### **1.-Theoretical framework.**

In distance education, as information and communication media, printed materials (guides, anthologies, books, notes, etc.) and other audiovisual media (videos, slides, radio cassette, etc.) have been frequently used. With the appearance of the latest generation of communication technology that is based on computing, new forms of distance education emerge as well as new ways of calling it.

Starting in the nineties and so far, we have witnessed dizzying changes in the development of the so-called ICTs that allow us to affirm that, at least the most advanced societies, have entered the so-called knowledge society (UNESCO, 2005)

The knowledge society is an approach that seeks to improve education, through the generation of knowledge, and how do we manage to be in this knowledge society? With the changes in education and the incipient need to convey knowledge to students, teacher training programs have been developed in which teachers must coordinate the increasingly complex professional skills of teachers, making general use of ICT In order to support students who personally create knowledge products and who are dedicated to planning and managing their own objectives and activities, in turn they are committing to the learning that will accompany them throughout their lives, which will lead them to develop indispensable skills in the century in which we live (Ability to collaborate,

With the progress of science and technology, and the emergence of the so-called knowledge society, it is strongly contrasted with the inertia of educational institutions, which does not always seem to advance with technology, the bleak scenario that can be seen in the educational institutions, must be seen with the multiple possibilities that open up in front of these entities to develop innovation and improvements in the learning process of their students.

How do we achieve an innovation process in education? And how do we carry out an innovation process in our institution? Achieving is synonymous with reaching, conquering, obtaining, achieving, but what is behind achieving a process of innovation in education? Behind a process of innovation are teachers, students, administrators and all those who will be involved in the development of this process, and when we speak of educational innovation we refer to any action planned to produce a change in higher-level educational institutions that promote an improvement in thinking, in the organization as well as in pedagogical practices and that allows the professional development of the university, innovating goes further, innovating is rediscovering, redesigning, inventing,

To achieve this goal, it is essential that students access a high-level academic education in which they perfect and develop knowledge and skills to learn throughout their personal and professional lives. The emergence and revolutionary development of information and communication technologies (ICT) have affected education by creating new ways of teaching and learning, assigning new roles and relationships - active and participatory - to the student and the teacher. Such is the case of distance education. Premises such as stimulating innovation, favoring professional performance and, of form.(Mena & others, 2007)

For an innovation process to occur, a set of prior factors is required that must occur within the educational institution, this is how we find certain institutions with delayed curricular plans and that their updating is slow, we find institutions who are not yet accepting the fact that our society today advances in relation to technology and demands new ways of obtaining knowledge, it is surprising the thousands of visits that a YouTube video can receive.

ICTs have gradually been integrated into university student life, we can see how young people interact with each other through their cell phone through applications, we can also see that the transmission of files such as tasks and



jobs or information about the class has been streamlined. Although mostly new technologies are used more for social reasons than for school activities, although progress is slowly being made to achieve a good fit in the university environment.

Technology is neither good nor bad in itself, but the question is how to use it. We need to understand the different strengths and weaknesses of different technologies, and the requirements for their effective use by expanding access and meeting student needs in a flexible and open manner.(Bates, Cruz, & Cruz, 1999)

1.1 Application of new technologies.

Implementing a traditional teaching model to educate everyone, trying to meet all the emerging needs and requirements is far from being efficient. We can see how other countries modify their educational system and model according to the needs of the new generations, and staying with the old methods can lead to a decline in the quality of education; For this reason, it is necessary to apply new tools to the ways of teaching and teaching students, who every day require up-to-date learning.

"Current trends in education could be synthesized in: massification, diversity of content and study-work combination. The traditional educational system cannot give a complete answer to these proposals, but it is even worse to ask ourselves: is it really desirable to have to periodically go to a school to collectively receive the desired teachings? Nobody can think that permanent education has to be equivalent to permanent schooling "(Sarramona, 19981).

Due to different circumstances that arise today, the need for educational improvement and development appears. Strictly following a model cannot be the most viable option for educational growth, since we can observe how the old training styles are becoming obsolete and insufficient to achieve satisfactory teaching; Due to this, the need for updating in educational structures is detected, that is, there is a growing demand for activities outside of formal methods.

The effectiveness of face-to-face schooling has been declining little by little, that is, students lose interest in classes and in the way of learning, with the emergence of telecommunications they find electronic media more interesting, and prefer an innovative class where these means can be applied.

Information and communication technologies give us the opportunity to make the rigidity of conventional training more flexible, offering us the option of adapting virtual classes to our schedules, giving us the possibility of accessing the platform at any time, ensuring the availability of the material. that we want to consult.

But a great defect that can be identified with the naked eye is the resistance of the conventional system to an innovation that adapts to new demands and expectations of people, who always hope to find something better and interactive.

The conventional system is created to train students before their participation in the labor field, although there are students who have jobs during their studies, for this reason it develops a self-taught personality displacing the teacher to achieve personal, reflective learning and significant. In this way, individual learning and teaching applied to specialized sectors and special subjects is developed.

At present it is necessary to combine theoretical learning with practical learning applicable to real activations, and students doubt the formal methods to achieve this objective, for which they seek new and innovative alternatives in electronic media; This is an opportunity that is being used more and more every day, but not enough to achieve the desired result.

That is why technological resources open the doors to new opportunities in the educational field, through the application of appropriate methods and the correct adaptation of electronic media, this without replacing the teacher, but as a support for face-to-face education, with possibilities of overcoming many greater with the use of multimedia material.

The materials for this didactic methodology are thought, designed, structured and developed for learning without direct contact between the teacher and the student and the didactic dialogue between the contents and the student. In general, they differ in conceptual content, which may come from self-made texts, bibliography, or anthologies by various authors, and procedural content, which promote proposals for action regarding what, when and how to do what is recommended.(Perkins, 2003).

The phenomenon of technological advances has had a positive impact on the educational field, with the emergence of interactive pages, specialized searches on the internet that allow access to the required information at the time it is needed with high availability.

In this way, students will learn more fully the topics seen in a classroom, since they can solve the doubts that may arise themselves without the need to continually go to the teacher, continuously improving individual learning.

Each person develops the way they learn differently and adapts to the various methods, always applying their own study techniques, but when the teaching methods are not adequate, student performance tends to decline.

It can be seen that the evolution of conventional teaching methods is necessary, so that in this way they grow with the requirements of the new generations, and thus gradually meet the new needs that arise in students.

The need for a combination between learning and work is increasingly clear, seeking ways to provide more practical experiences to students, bringing them closer to a dynamic practical field in which they can be interested and easily develop, an experience that covers their expectations.

For this reason, it searches for more satisfactory alternatives and would provide feedback in which we can see effective and fast results.

The dizzying evolution of this relatively recent way of teaching considerable changes in its methodology and in the use of materials, media and structure, a rare aspect in the ordinary educational world, where changes, when they occur, are made extremely slowly. (Garcia, 1994)

The term distance education is not unknown today, many people around the world can identify with this apparently new teaching method; A large number of people at this time are able to take different types of courses or classes in almost any area via the Internet, although this type of learning is nothing new, since in previous decades correspondence courses were very popular. This technique could also be applied by companies but in a different way, since different companies used this system to offer and sell different products, for this reason the coupling of this modality in universities is essential, because in this way the students are on their way the use of information and communication technologies in a more professional way

1.2 The teacher in distance education.

One of the characteristics of face-to-face teaching is the direct guidance and advice that the student receives from the teacher, in the distance mode this direct contact disappears almost completely, since the student develops a self-taught personality, that is, it is individual study and autonomous; It does not refer to the complete elimination of the teacher in the student's learning, if he does not become a guide in the application of this method.

"Teacher-student separation, this is a feature explicitly or implicitly present in all formulations of the concept. It is the most typical aspect, necessary but not sufficient, for the definition. In almost all conceptualizations, this distance between the teacher / trainer and the student becomes visible, replacing face-to-face contact, at least as a necessary condition of the teaching-learning relationship according to the traditional model. "(Aretio, 2004)

The tutorial task is the guiding relationship established by one or more teachers with each student in particular, to help them understand the content, interpret the instructions, the time and the appropriate way to carry out assignments, exercises or self-evaluations, delivery schedules and, in general, for the timely and personalized clarification of any type of doubt.(Perkins, 2003)

In the use of this system the student becomes fully responsible for their activities, there is no teacher to monitor that they are complying with the program or whether or not they have studied the topics that are being viewed, nor will they have a rigid schedule or a classroom to attend, as these are not offered. Therefore, he will decide the most appropriate place to study, he will choose the most appropriate hours to review the topics in the way that best fits his daily routine.

Distance education has various means by which it can be applied or taken, technological and multimedia means have a great participation in the current application of this method, since young people are the ones who have the most acceptance and adaptation to these innovative information media. The implementation of information technologies in higher education is essential due to the new needs and requirements that arise today.

Talking about the teacher in this environment is taken as the academic manager of the program who is the one who controls the creation of a certain program, is dedicated to managing the materials that are provided on the platform. The teacher has the function of adequately planning various activities that are enriching



For the learning and development of new competences of the student, for this it is necessary that they have a mastery of the content that is going to be handled so that in this way they can solve the doubts that arise during the knowledge generation process.

"The difference in the degree of separation between teacher and student in one and the other way of teaching lies in the design of the teaching-learning process itself. While in face-to-face systems this design is fundamentally based on the direct face-to-face relationship for the transmission of the information necessary to acquire the knowledge, skills, attitudes, etc., generally produced in the real classroom, in distance systems this relationship it is deferred in space and, in a good part of the process, in time, virtual environment. "(Aretio, 2004)

They must also carry out orientation and monitoring activities, that is, they must make sure that the material is clearly explicit, and if it is not, they must put it in a simpler way so that the student is able to progress and advance and not lag behind; For this reason, you must follow up on the activities that are carried out on the platform, in order to generate feedback between the teacher and the student.

So that everything can flow according to the expectations of the program, the teacher must develop a knowledge of information and communication technologies, it is not necessary that he be an expert in the use of these, but a basic knowledge with the which can correctly manage the virtual classroom and material that will be offered in it, that is why you must strategically select the technological knowledge that you will need for the virtual education process.

Creating a pleasant environment or a good teacher-student interaction in a virtual modality is very different than a face-to-face education, since it does not exist

physical and direct contact with the teacher, although that is what distinguishes distance education; the interaction is more one of consultation and guidance, for this reason the way in which this new type of indirect relationship between the one who teaches and the one who learns must be defined, although it is more between the one who guides and guides and the one who learns. Electronic interaction will depend on the availability of the two parties, since there is no rigid schedule to comply with, and it is necessary to specify the times that certain activities or work will be carried out will be required.

Now the need for training in this new field to improve traditional teaching belongs to the students and the teacher, so that the learning style can be optimized. The student is very well adapted to the technologies and the means by which the exchange of information occurs today, but you use these means for social and entertainment purposes wasting the great capacity of this to develop new skills. The teacher is trained with a formal and rigid teaching style, he is not fully adapted to new technologies, so he cannot efficiently couple these technological tools in order to improve the study of students.

The use and application of these new tools requires the acquisition of new knowledge based on information technologies, that is, training is required in the correct way to use the technology that is within our reach. The combination of various means can increase the quality of learning-teaching that is generated between the teacher and the student in the distance system, that is why some call these tools "multimedia" because they use multiple means to generate knowledge .

With the correct training of the teacher and the student in the use of technological means in education, it can be thought that the distance modality can offer opportunities that the face-to-face modality cannot, this method being of great benefit to the student, since it develops more sense of responsibility, more discipline in what you do, among many other skills.

Although it could easily be thought that one could only learn in theory with this learning technique, that only material could be consulted without being able to put what was learned into practice, without seeing real results that are useful to us; although that is totally wrong, since information and communication technologies offer us endless tools in which all the theoretical knowledge that has been learned could be applied.

1.3 Educational Innovation.

In order to implement new methods and techniques in education, it is necessary to verify their usefulness and check if they can really generate satisfactory results, which can be very useful for the people who will use it. For this reason, it is necessary to carry out a meticulous investigation of the method and / or technique to be used, so that the different characteristics that it contains can be discovered and also to be able to find if there is any possible problem and its functionality can be tested.

Uses, possible results of basic research, new methods and means are studied to achieve a concrete, practical and determined objective. As a consequence, they are generated: a single product, a limited number of products, operations, methods or systems. The results are capable of being patented (Escorsa and Sole, 1988)

With the development of an investigation, it seeks to obtain concrete results that are supported by theory and practice of the application of the process or method investigated, that is, it seeks to prove the feasibility of use, if it can really generate a positive effect at the time of being executed. practical way.

The purpose of an investigation is to obtain a result that is beneficial to others; To innovate, it is necessary to take the results of investigations carried out that have generated feasible results, in order to apply and / or implement them to improve existing techniques or processes.

Now, innovating does not imply inventing or creating something new, but rather looking for new applications for what already exists or for the things that we use but that can be used for a very different purpose but that can be beneficial when applied in this new way.

An innovation is the introduction of a new product (good or service), or a significantly improved one, it can be a recent process, a new marketing method, or a modern organizational system, which is introduced into the internal practices of a company, the organization of the workplace or applied in external relations. For there to be innovation, it is necessary at least that the product, the process, the marketing method or the organizational system are new to the organization (or significantly improved). This concept encompasses products, processes and methods that companies themselves have developed, or those that they have adapted from other organizations (OECD and Eurostat, 2005).

According to the Oslo Manual, OECD and Eurostat (2005), four types of innovation can be distinguished:

• Product innovations: corresponds to the introduction of a good, a new service, or an existing one but significantly improved in terms of its characteristics or its intended use. Process innovations: is the introduction of a new (or significantly improved) production or distribution process. This implies significant changes in techniques, materials and / or computer programs.

• Marketing innovations: it is the application of a new marketing method that involves significant changes in the design or packaging of a product, as well as in its positioning, promotion or pricing.

• Organizational innovation: it is the introduction of a new organizational system in the practices, the organization of the workplace or the external relations of the company.

However, for some authors the idea that the innovative effort that promotes the generation and incorporation of knowledge to respond to the challenges and problems that societies must face is a key factor that allows not only companies, but also to the different territorial areas, to be inserted with a better position in an abstract space of interacting networks (Caravaca, González and Silva, 2003).

Then we can innovate educational models with the implementation of new tools that can optimize the learning process, and can motivate the student to improve their skills and develop new ones that are useful in the field where they will exercise their knowledge.

Technology has allowed us to advance in great strides in different areas, and it is not news that it has also improved the teaching-learning methods and techniques, we can see it with various tools that the internet offers us, and with the modalities and platforms that we can use to study independently without the need to be in class in person or with the active participation of a teacher, if not only as a guide and support for the student, who during this process develops autonomy and independence and can adapt this type of learning to their own schedule, giving you great flexibility in the study.

## 2 Methodological framework.

This research has a quantitative approach (Hernández, Fernández and Baptista, 2010). This project begins with the idea of discovering if there are any problems with the accessibility of the platform of the distance modality of the Autonomous University of Tabasco, since as a student who has used this modality of study, I was able to perceive the various points of improvement that This new tool could be made, since it is a very useful way to continue studies in a flexible way using the new technologies that are offered to us.

The distance education modality is an option that is offered to the students of the Juárez Autonomous University of Tabasco, in which we can take a subject through an electronic platform where we can find study material, we can interact with other students and with the teacher. From the different comments my colleagues make about different characteristics that could be improved to this new modality, the idea arises to investigate what are the improvements that are required on the platform page by students of the degree in commercial relations, to whom this mixed modality of study is offered.

The instrument used to collect information about the students' requirements was an internet survey, which was prepared taking into account a previous pilot survey of physical form in which the reaction of the students was observed when they encountered questions that were related to ideas they had about the platform page they use, the results helped to elaborate more specific and detailed questions that could achieve the desired objective, which was evaluation of the distance modality platform, if the students really felt satisfied with the different characteristics with which platform currently has and if necessary an update and improvement of it.

The objective was to see if the qualities of the platform were sufficient as it is currently, and to find if an update was necessary, this referring to the design of the icons, the color of the page, accessibility, the location of the icons. elements within the page, to the ease with which students moved and handled within it, if it is really attractive and novel for them.

### **3 Results**

In relation to the foregoing, a pilot survey was first applied to 30 undergraduate students in marketing with a total of 16 questions, in order to observe the level of difficulty of the questions, and to define what information was necessary and which information was required. the resulting data could be discarded

They provided enough information to be able to remove or add new questions to the survey.

During the piloting, the students showed interest in improving the remote mode platform page; different updating needs were found in which the use and performance of the page could be optimized.

Following up on this result, the final survey was focused on what was to be improved, what are the characteristics that require innovation and which could be added, so that in this way it is easier for students to generate knowledge. using this modality.

A total of 80 students of the bachelor's degree in marketing of the eighth cycle were interviewed, of which 94% have taken courses in distance mode, so they are familiar with the use of the page and in this way they can indicate the characteristics that could get better at this.

### TABLE 1

Concentrated questionnaire results

| Question  | ANSWER                                    | OUTCOME |  |  |
|---|---|---------|--|--|
| Cycle you are currently studying:                               | Seventh                                   | 6%      |  |  |
|   | Eighth                                    | 88%     |  |  |
|   | Nineth                                    | 0%      |  |  |
|   | Tenth                                     | 6%      |  |  |
|   |   |         |  |  |
| Are you a regular or irregular student?                         | Regular                                   | 80%     |  |  |
|   | Irregular                                 | twenty% |  |  |
|   |   |         |  |  |
| Have you ever taken courses in the distance mode?               | Yes                                       | 94%     |  |  |
|   | Not                                       | 6%      |  |  |
|   |   |         |  |  |
| Are you currently studying any subject in                       | Yes                                       | 13%     |  |  |
| distance mode?  | Not                                       | 87%     |  |  |
|   |   |         |  |  |
| How fast can I recognize the icons on the remote mode platform? | I easily find what I am looking for.      | 29%     |  |  |
|   | it took time to find what I'm looking for | 64%     |  |  |
|   | I rarely find what I'm looking for        | 0%      |  |  |
|   | I hardly find what I'm looking for        | 7%      |  |  |
|   |   |         |  |  |
|   | They are always where they indicate me.   | 43%     |  |  |



| What do you think of the location of the files?  | They never upload the files.  | 0%   |
|--|---|--|
|  | never found where indicated   | twenty-one%  |
|  | The location is hard to find.   | 36%  |
|  |   |  |
| Have you had a problem uploading the tasks?  | I can never upload the file.  | 7%   |
|  | I have no problems.   | 64%  |
|  | The file takes time to upload.  | 29%  |
|  | I do not identify where to upload files.  | 0%   |
| s the agenda easy to consult?  | You hardly find it.   | 39%  |
| s the ugenuu easy to consult:  | yes, it has a unique icon   | 39%  |
|  | You have to search too much.  | 38%<br>8%  |
|  | It should have a unique icon.   | fifteen%   |
|  | it should have a unique icon.   | Inteen /0  |
| Can you easily review the platform guides?   | They are hard to find.  | 2.3%   |
|  | They should have quick access.  | 46%  |
|  | I never find them.  | 16%  |
|  | are always at hand  | fifteen%   |
|  |   |  |
| What do you think about the size of the  | they are not well distinguished   | 2.3%   |
| latform icons?   | They are too big.   | 0%   |
|  | they are good in size   | 54%  |
|  | They should enlarge them a bit.   | 2.3%   |
|  |   | 0.04   |
| What do you think of the location of the   | should be on the left side of the page  | 0%   |
| cons?  | should be on the right side of the page   | 2.3%   |
|  | they should be in the upper right   | 8%   |
|  | They should be displayed in a list.   | 69%  |
| What do you think of the accessibility of the  | It took him a while to find what I'm looking for.   | 14%  |
| age?   | There may be shortcuts.   | 43%  |
| Pu201  | The icons could be differentiated with different  | 22%  |
|  | colors.   | /*   |
|  | Could be more specific.   | twenty-one%  |
|  | ***   | 1004   |
| <i>How would you improve the appearance of</i>   | I'd section the icons.  | 10%  |
| the page?  | I would put more shortcuts  | fifteen%   |
|  | It would improve the structure.   | fifty%   |
|  | It would highlight what is most important.  | 25%  |
| What do you think of the visual style of the   | It is pleasing to the eye.  | 7%   |
| What do you think of the visual style of the page?   | It constantly confuses me.  | 14%  |
|  | it could get better   | 72%  |
|  |   | 7%   |
|  | Is hard to understand.  | . , •  |
|  | Is hard to understand.  |  |
| What do you think of the font used on the  | Is hard to understand.<br>It's not understood   | 7%   |
|  |   | 7%<br>fifty%   |
|  | It's not understood   |  |
|  | It's not understood<br>It is very small   | fifty%   |
| latform?   | It's not understood<br>It is very small<br>Is very large<br>Seems appropriate to me   | fifty%<br>0%<br>43%                                  |
| latform?<br>What do you think of the colors used on the  | It's not understood<br>It is very small<br>Is very large<br>Seems appropriate to me<br>They are very showy, I don't like them   | fifty%<br>0%<br>43%<br>0%                            |
| latform?<br>What do you think of the colors used on the  | It's not understood<br>It is very small<br>Is very large<br>Seems appropriate to me<br>They are very showy, I don't like them<br>They are very opaque, I don't like them.   | fifty%<br>0%<br>43%<br>0%<br>fifty%                  |
| latform?<br>What do you think of the colors used on the  | It's not understood<br>It is very small<br>Is very large<br>Seems appropriate to me<br>They are very showy, I don't like them   | fifty%<br>0%<br>43%<br>0%                            |
| latform?<br>What do you think of the colors used on the<br>age?  | It's not understood<br>It is very small<br>Is very large<br>Seems appropriate to me<br>They are very showy, I don't like them<br>They are very opaque, I don't like them.<br>The colors are good, I like them   | fifty%<br>0%<br>43%<br>0%<br>fifty%<br>fifty%        |
| platform?<br>What do you think of the colors used on the<br>page?<br>What do you think of the colors of the  | It's not understood<br>It is very small<br>Is very large<br>Seems appropriate to me<br>They are very showy, I don't like them<br>They are very opaque, I don't like them.<br>The colors are good, I like them<br>I can't tell them apart from each other. | fifty%<br>0%<br>43%<br>0%<br>fifty%<br>fifty%<br>43% |
| What do you think of the font used on the<br>olatform?<br>What do you think of the colors used on the<br>page?<br>What do you think of the colors of the<br>shortcuts? | It's not understood<br>It is very small<br>Is very large<br>Seems appropriate to me<br>They are very showy, I don't like them<br>They are very opaque, I don't like them.<br>The colors are good, I like them   | fifty%<br>0%<br>43%<br>0%<br>fifty%<br>fifty%        |



|   | I can tell them apart, but they should have a different | 43%         |
|---|---|-------------|
|   | color.  |             |
|   |   |             |
| What multimedia material would you like to see on the platform? | Videos.   | 22%         |
|   | Video call.   | 16%         |
|   | Chat in real time.                                      | 30%         |
|   | E-books.  | 32%         |
|   |   |             |
| In which section of the page would you like                     | Within the section of you tasks.                        | 22%         |
| the multimedia material to be found?                            | In the forum section.                                   | twenty-one% |
|   | In the guide section                                    | 0%          |
|   | In a special section for that material.                 | 57%         |
|   |   |             |
| What do you think of the page loading speed?                    | It takes a long time to charge.                         | 13%         |
|   | It is very slow when opening a link                     | 27%         |
|   | Not bad, but could improve                              | 47%         |
|   | Seem right  | 13%         |
|   |   |             |
| By adapting the platform for mobile devices,                    | It would make material inquiries easier for me          | 83%         |
| how could it make it even easier for you to                     | I don't have those kinds of devices                     | 17%         |
| access it?  | I could upload assignments on time                      | 0%          |
|   | · · · · · · · · · · · · · · · · · · ·                   | •           |
| What do you think about having all the                          | It would make the query easier                          | 36%         |
| material on one page  | It would be confusing                                   | 14%         |
|   | seems fine, if you have a good order                    | fifty%      |
|   | The page would be very loaded                           | 0%          |
| Table 1. Own elaboration  |   |             |

Table 1. Own elaboration

Questions were asked focused on the design of the page, on how accessible it was, and how easily students can navigate it; To achieve this objective, the students were questioned about the recognition of the icons and the location of the files, resulting in the students delaying to find the specific section or area they want to access. Concluding that a new design is necessary for the icons, which facilitates the search for the desired sections and materials.

Regarding the load of tasks to the platform and the consultation of the syllabus and guide of the subject, the students have not had problems when uploading the work files, but it has taken a long time to upload the file. Regarding the material, it is difficult for them to find it easily, they waste a lot of time searching in which area of the page it is located. It can be concluded that you need to create specific shortcuts or icons for each material, to just one where you can find everything.

Focusing on the size and location of the icons and the accessibility of the page, 54% of the students think that the size of the icons is fine and 46% think that they should be a little bigger; and regarding their location, most of the students agree that they should be displayed in a list; The result shows that only a small increase in the size of the icons is necessary to make navigation on the page more comfortable, but they need to be in a general list to make their location and search easier.

Regarding certain characteristics of the visual aspect such as colors and typography, the students agree that the visual style of the page could be improved if a better structure is implemented, that is, a structure that makes navigation on the page more comfortable; while the font used is very small and is not so readable for them; On the other hand, 50% of the students agree with the colors used on the page and the other 50% think that they should be changed and on the other hand, 72% of the students believe that the visual style of the platform page could be improved; on the other hand, in the shortcuts they can distinguish them, but believe that the color should be different. In conclusion, with this result it is necessary to make some changes to the visual style by changing and improving the structure of the page, changing the typography for a more understandable and with a better size, a different and more striking color could also be used to differentiate the shortcuts.

Regarding the update and improvement, it is agreed that the implementation of multimedia material such as videos, video calls, real-time chat and electronic books, could improve the quality of learning through this



modality, while the adaptation of the platform to mobile devices would be a great improvement and benefit for students. It is concluded that it could be an innovation to implement multimedia material to improve the quality of learning of this teaching modality, and the adaptation of it to mobile devices can facilitate the consultation of material for users.

#### **4** Conclusions

After carrying out a detailed analysis of the final results, it is concluded that the need to improve the visual style and accessibility of the remote modality platform page is evident, since for students who are users it is not easy to find the desired material with ease demonstrating that a new design is necessary for the icons, which facilitates the search for the desired sections and materials; Well, for new generations it is a requirement that when entering a page they can recognize and find what they want quickly, being necessary to create shortcuts or specific icons for each material, to just one where you can find everything.

It is a visual style of utmost importance for students since it makes browsing and using the platform comfortable, it is evident after collecting data that there are certain characteristics that need to be improved, in order to ensure that the user of the remote mode has an experience satisfactory; the details of a page can make the person who uses it feel comfortable, both for the teacher and for the student, and this determines their consistency in the use and revision of it, and the result shows that only a small increase is necessary of size in the icons to make navigation on the page more comfortable, but they need to be in a general list to make their location and search easier. Although other factors such as structure and colors may provide more comfort, therefore,

Another important characteristic is the innovation and updating of the material that is offered to us, it is not very attractive for us students to enter a page that is outdated, and that has material that is no longer used, knowing that there are better things than we can. can offer, that is why it is an innovation to implement multimedia material to improve the quality of learning of this teaching modality, and the adaptation of it to mobile devices can facilitate the consultation of material for users. The updating and innovation of the self-learning pages is necessary, since this can make the student that the user of these pages determine to abandon and continue with this distance mode,

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