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**ADVANTAGES AND DISADVANTAGES OF USING ELECTRONIC DEVICES IN THE CLASSROOM: PERCEPTION OF UNDERGRADUATE STUDENTS IN COMMUNICATION SCIENCES**

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**ABSTRACT:**

The use of electronic devices and resources in the classroom is part of the daily activity for lecturers and students, and it meets the requirements of the "longlife learning" advocated by the EHEA. Thus, several studies have explored the importance of interaction through social networks, using blogs and other electronic resources. Some lecturers have also conducted various experiences related to the use of those devices that allow access to these technologies. The influence of communication technologies provides clear advantages for both the learning process of students and for the daily work of their teachers. However, there are many risks and disadvantages resulting from such use. This article proposes an initial investigation to determine the extent of computer use in the classroom between student's degrees in Communication.

**KEYWORDS:** laptop – electronic device – EHEA – classroom – undergraduate students – risks – disadvantages

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# **VENTAJAS E INCONVENIENTES DEL USO DE DISPOSITIVOS ELECTRÓNICOS EN EL AULA: PERCEPCIÓN DE LOS ESTUDIANTES DE GRADOS EN COMUNICACIÓN**

## **RESUMEN:**

El uso de dispositivos y recursos electrónicos en el aula forma parte de la actividad diaria en que nos movemos docentes y estudiantes, y que responde a los requerimientos del aprendizaje a lo largo de la vida que propugna el EEES. Así, diversos estudios han profundizado en la importancia de la interacción a través de las redes sociales, o el uso de blogs y otros recursos electrónicos. También se han desarrollado diversas experiencias en relación con el uso de los dispositivos que permiten acceder a dichas tecnologías. La influencia de las Tecnologías de la Comunicación aporta ventajas claras tanto para el proceso formativo de los alumnos como para la labor diaria de sus docentes. Sin embargo, son muchos los riesgos e inconvenientes derivados de dicho uso. En este artículo se propone una investigación inicial para conocer el alcance del uso del ordenador en el aula entre los estudiantes de grados en Comunicación.

**PALABRAS CLAVE:** ordenador portátil – dispositivo electrónico - EEES – aula – estudiantes universitarios – riesgos - inconvenientes

## **1. INTRODUCTION**

In our desire to know more closely the reality regarding the advantages of using new media and codes of communication to get closer to the students with whom we develop daily in our teaching activity, and given the previous experiences of research regarding the Contents, we decided to start the study investigating the advantages of the continents, that is, the electronic devices used in the classroom. Throughout the present article we make a review of previous studies related to the use of social networks and other electronic resources as valid means for teaching activity and in general, academic, as well as to some experiences and studies regarding the use of electronic devices, everything is clearly related to the student profile currently in the university, the so-called Generation Y.

## **2. OBJECTIVES**

Through the present work we have tried to deepen the perception of the students regarding the use of electronic devices in the classrooms, in order to know the motivations for the use of the same, and to identify what are, for them, the Main advantages that they provide, and the possible drawbacks derived from such use.

## **3. METHODOLOGY**

To carry out the study, we went to the students of degrees in Communication, and we gave them a survey through an online platform where they could reflect their

opinions. We believe that Communication students have a particularly interesting profile because they are even more familiar with the use of these technologies, as they are closer to their daily activities, both leisure and academic. This questionnaire, which is presented in the appendix of this article, was presented as an initiative outside teachers, so as not to condition the answers.

The universe taken is the one of the students who studied the subject of Communication and Marketing, a total of 145, because it allowed to go to students who attend it at different times of their academic life depending on the degrees and language chosen to carry out their career, and To obtain answers from two age profiles (without a posteriori perceived a differentiating bias in the results obtained between one and other): students between 18 and 20 years, who are in the first half of the degree, they have not yet practiced in enterprises and even may not belong to the Millennials generation if we follow the definition of such a generation proposed by some research (Pew Research Center, 2014, PWC et al., 2014). The other half of the sample is composed of students aged 21 to 24, also undergraduate students or degrees in the field of communication.

#### **4. DIGITAL GENERATION**

The "Net generation" (Oblinger and Oblinger, 2005), generation BD (Born Digital), generation C - "Creativity, Content, Sharing" - (Búa, 2010), Echo Boomers (OMD, 2012), or, more commonly denominated, Generation Y or Millennials, is constituted in Spain by more than eight million young people, born between the eighties and the first half of the nineties. They have grown up with technology as an integral part of their lives, and their "mother tongue" is the digital language of electronic devices connected to the Internet. For them, instantaneity is intrinsic to communication, which in addition can and should "be" multitasking, because they consider that they are so. They can do several things at once, everything is here, and now, at maximum speed. With this profile, the new technological tools available to them become a fundamental element in their lives: social networks, blogs, forums, video platforms, etc. are a medium focused on entertainment, which allows them to communicate with their own, and decide what they want to share of their goods (music, videos, etc.) and knowledge with others.

In this sense, some revealing data show that 97% of Internet users between the ages of 14 and 17 are habitual of the social networks. 83% of them, in addition, connects to the networks through the mobile devices. Although among the youngest, Facebook is also the most well-known and used platform - as noted by Túñez and Sixto (2012), it is the second most visited website, and almost 90% of social network users have a profile in it - their favorite social network is Facebook, according to the IAB study (VI Annual Survey of Social Networks IAB-Elogia, 2015). In fact, 78% of young people between the ages of 16 and 25 have an account in the Spanish network, a fact followed very closely by the use of YouTube (The Cocktail Analysis, 2015). In their use of such networks, young people concur with this task with other tasks such as listening to music (82%), watching television (47%), studying (35%), and others such as performing class assignments with low-implication, watch films or

series on the Internet, or doing various household tasks (11%) (Monge and Olabarri, 2011).

According to the European Media Consortium Study of the European Interactive Advertising Association (EIAA, 2010), young people spend an average of 14.6 hours a week surfing the net compared to 12 hours dedicated to television, and they are the main Internet surfers through mobile devices, since they devote almost 6.4 hours a week to connect through these devices. In fact, one can speak of a phenomenon of nomophobia or irrational fear of not having the mobile phone, which generates anxiety and even panic attacks, and that in Spain seriously affects eight percent of university students (Villar, 2012)

These youngsters are decision makers of purchases made in their households, especially in products linked to technology, because they are authentic techno-addicts who have their own computer in 92% of cases, and 97% have a mobile phone. (OMD, 2012).

The relationship between young people and interactive environments is raising growing interest in both the academic and professional worlds, as young people are a commercially attractive audience and pose a major challenge to their educators (parents, teachers, including media) on how to access them despite the digital divide between one generation and another regarding the channels and codes of communication between them (Alonso and Bartolomé, 2011, Rodríguez and Santamaría, 2012)

For this generation, communication must be based on instant messages, fast, simple, highly graphic or visual, that allow them to carry out several activities at the same time, and change processes with great speed. Thus, they want to have accessible, fast and graphic information, since their vital learning has taken place between screens (Alonso and Bartolomé, 2011). For Colás, González and Pablos (2013), young people are increasingly expressing themselves through virtual communication systems, and prioritize these forms of communication over traditional ones, based on personal contact.

## **5. THE EHEA, TEACHING AND TECHNOLOGY**

The EHEA is already a reality that, as predicted by Caldevilla (2009), must bring us better citizens, better professionals and better teachers. An important aspect in the adaptation to the EHEA involves the change from a purely teaching-based model to a learning-based one. It is not simply that the student acquires a series of knowledges, but that he is able to "learn to learn", autonomously, in the same way that it will happen throughout his professional career, to adapt to new and changing business models (Alonso and López, 2007).

This transformation, which implies a more active role of the student, and which makes it the center of the educational process, does not mean a mere isolated and independent work of the student, thus freeing the teacher of certain tasks more or less attractive to him (correction of works and exams, teaching of classes, tutorial attention ...). On the contrary, this methodology implies an increase in the work of

the teacher, who must develop new evaluation methods, prepare specific materials for the new work platforms (Alonso and Bartolomé, 2011), and especially, increase the tutorial work to help Students to sharpen their competence to seek, select and critically evaluate information (Peña, 2008).

If the traditional student has always shown a reactive attitude and little involvement in his / her own formative process, the current student, with the cultural and educational base with which he / she accesses higher education, may collide with the new model (Bautista, Borges And Forés, 2006). García (2009) believes that students' learning in this new model may favor a lifelong education, but it requires an evident commitment of responsible, motivated, collaborating and strategic students.

In its adaptation to the new educational model and the needs of a society based on Information and Knowledge, the Spanish educational system has decided to incorporate the new technologies, as much to the teaching practice, as to the management and to the investigation. In 2009, for example, there was a university average of 670 free-access computers, an average of 0.057 per student (11% more than the previous year). In that year, 92.5% of the students used the institutional platform of support to the teaching installed in their center. In the case of teachers, this percentage stood at 71.8%. It should be noted that in 2006 only 60% of the students used these tools. (Marín and Armentia, 2009).

To illustrate this process more clearly, in the first place, it is necessary to define what we mean by these "no longer so new" technologies, or information and communication technologies, commonly called ICTs. ICTs are a set of processes and products derived from the new tools (hardware and software), information supports and communication channels, related to the digital storage, processing and transmission of information quickly and in large quantities (González Et al., 1996). Technological innovation in ICTs has allowed the creation of new communicative and expressive environments that open the possibility of developing new formative, expressive and educational experiences, making possible the realization of different activities not imaginable until recently (Ferro, Martínez and Otero, 2009). The irruption of digital technologies has dramatically transformed reading, writing and all forms of communication, in a process perhaps only comparable to the invention of printing (Grafton, 2007).

Thus, the use of the Internet through personal web pages, intranet of universities, pages and portals with subjects related to subjects, generalist and specialized social networks, etc. are just some of the applications of ICT in teaching. In the same way, the students come to these technologies attracted by the ease of use that they assume, the relationship between technology and leisure, and the amount of information available thanks to the use of devices connected to the Internet.

## **6. ADVANTAGES AND DISADVANTAGES OF THE USE OF DEVICES AND ELECTRONIC RESOURCES IN THE CLASSROOM**

And is that the use of new information and communication technologies, brings a reasonable number of advantages and advances, but also involves a set of difficulties and disadvantages to which teachers must seek a solution.

For Cabero and Gisbert (2005), a large volume of information, easily updatable, and flexible access in space and time is available to students, which allows the delocalisation of knowledge, increases student autonomy, favors a just in time and just for me training, offers different synchronous and asynchronous communication tools for students and teachers, favors multimedia, group, collaborative and interactive training, which saves costs and travel, and also allows to leave in the servers a record of the activity of the students.

For Wang, Hwang and Fesenmaier (2009), the advantages of using such media, supported by the Internet, can be summarized in the speed and effectiveness of the communication made, the interactivity they provide, the ability to extend the messages as a mouth-to-ear communication between users and at the same time the possibility of achieving a unified message for all, the creativity they offer in the construction of messages, and the ability to create long-term relationships with a low cost among different audiences.

López Méndez (2009) points out that students will be able to acquire a series of skills using these technological tools, such as learning to search, select and analyze information on the Internet for a specific purpose; acquire the skills and management skills of the different technological tools and resources; completing and performing different learning tasks; communicate and work collaboratively remotely using Internet resources: forums, wikis, blogs, chats, file transfers, or emails; writing written texts; express and disseminate their ideas and works using different forms and resources; solve online exercises; to elaborate multimedia presentations, as well as to develop projects of works in the web and leave them exposed to the public.

The use of ICTs also improves communication between the different agents of the teaching-learning process, in the sense that teaching can be more personalized (Marqués, 2001). The same teacher can develop different strategies with different students of the same group. For example, any student may raise a question, send a paper, make a query, ask for support or request additional work from his teacher, depending on his interest, ability and involvement with the subject. This can raise the interest and motivation of students and improve educational effectiveness, thanks to the new tools available.

The use of ICTs allows quick access to information and the possibility of interacting with it, both for teachers and students, thus reducing the degree of obsolescence of information, and using more efficiently the different sources available to all (Lara and Duarte, 2005). In addition, it allows the teacher to create complementary learning support activities thanks to the many resources that can be accessed online.

However, the use of such technologies incorporates not a few drawbacks. Young people say they have a hard time concentrating before starting works, that they feel anxious when they see alerts on their devices indicating notifications that they

cannot answer immediately, that their spelling and writing have been harmed by the speed required for the response in the chat rooms. devices and that their academic uses do not transcend search engine information and file submission (Arroyave, 2013).

The seriousness of this fact is clear if we consider that written production remains one of the fundamental criteria for evaluating the performance of students (and in their professional future, in many cases). Not only insofar as writing allows him to become aware of his process of learning and construction of meanings and exploration of ideas (Wells, 2001), but also because the demands of scientific writing compel him to think more rigorously. The domain of reading and writing is determinant, and from the educational field it is considered that the skills and / or communicative skills, called "the four skills" must be developed with a high degree of competence: oral comprehension through listening, oral expression, comprehension of writing, and written expression (Ramírez, 2002). In this sense, it is enough to remember that sadly Spain is below the OECD average in reading, and in fact, the government has been urged to improve the level of oral language proficiency of students, as well as linguistic competence in oral comprehension, because this is a significant difference of the Spanish educational system against other more successful ones like Finnish (Europa Press, 2013).

Many studies have addressed issues related to "content" in this new environment. Specifically, much has been written about the preponderant role of social networks, considering that they have a lot to do with the new active and participative methodologies of the European Space of Higher Education, in their capacity for the exchange and development of knowledge, especially in terms of collaborative work, which increases motivation; it favors higher levels of academic achievement, since individual and group learning are fed back; it improves retention of learning; it strengthens critical thinking and multiplies the diversity of knowledge and experiences that are acquired, and facilitates the organization of group activities (Espuny et al., 2011, Martín-Moreno, 2004, Cenich and Santos, 2005).

However, Garrigós (2010) points out that only 25% of students consider that using social networks has helped them to improve teamwork. According to Caldevilla (2010), social networks contribute to the dispersion of attention, slow communication by the multitasking action of sender and receiver, reduce productivity, impoverish the quality of the language, encourage impersonation and plagiarism, generate addictions or promote isolationism. Although students assert that the use of the networks does not interfere with their academic results, several studies show the opposite, depending highly on the student's ability to be really multitasking and his interest in studies (Rouis, 2012).

Previous research has also looked at the devices from which students connect to the Internet. Several studies carried out among Spanish adolescents (Sánchez-Martínez & Otero, 2009; López-Fernández, Honrubia and Freixa, 2012) showed that intensive use of the cell phone was associated with excessive consumption of alcohol and tobacco, depression and school failure (Garcia and Fabila, 2014). Other phenomena

associated with the use of mobile electronic devices such as tablets and cell phones are those such as cyberbullying or sexting (Pew Research Center 2010).

Other studies have analyzed the role of laptops in classrooms. Hembrooke & Gay (2003) found that, although the devices made it possible to take notes faster or to access more quickly online materials related to the course, and even in some cases, they encouraged the student's interaction with the teacher and with the rest of the class, students who came to the classroom with a laptop computer remembered less class content at the end of the class than those who did not use their computer during it.

Rockmore (2014), a teacher at Dartmouth, notes that, despite having established in the course program a normative or "etiquette" about when, how and how to use such devices in the classroom, the convenience advantage for taking notes -an advantage that he saw clearly- was overcome by the disadvantage of the number of students who was distracted doing other tasks. Also, taking notes through the computer becomes an activity that requires much less concentration than the same one made on paper, so the knowledge fixation is less, as has been shown in a recent study by Mueller and Oppenheimer (2014), Princeton and UCLA professors respectively.

Gross (2014), a postgraduate professor at Columbia University, adds that the fundamental reason for banning the use of electronic devices in the classroom is not so much the distraction of the user that in the end it is a problem only for him, Generated in the students around them. Green (2016), a professor at Rutgers Law School, has also recently banned the use of electronic devices in his classes, considering that computer-based note taking involved an exercise in mere textual copying versus the need for synthesis. The taking of notes by hand, and especially in contrasting the inability of students to concentrate 100% on a task, a debate, a job, etc. When they had access to electronic devices (a circumstance that they decided to check in order to "catch" a student by watching in streaming a hockey game in their class).

We talk about a multitasking or multitasking job when we refer to the accomplishment of at least two tasks at the same time (Benbunan-Fich and Truman, 2009). It could be considered that in this new environment, the student becomes multitasking by necessity and imperative of the system, and that one can perform an effective and successful work being in the classroom paying attention to the teacher, and at the same time working with the computer, looking for information, or just checking the mail. However, numerous studies indicate that students who take their computer to the classroom end up engaged in a kind of multitasking work that forces them to constantly change their attention from the tasks that are developed in the classroom to which they are performing in their computer, often alien and different from the first (Kraushaar and Novak, 2010). Although many students believe that they are perfectly capable of doing this work, the idea of the multitasking student or worker has been proven to be erroneous in order to achieve academic excellence, as the number of mistakes and dirty tricks that memory can play on us (Rubenstein, Meyes And Evans, 2001). At the same time, the lack of concentration makes it less



time and effort to assimilate knowledge, it is not properly fixed and even more difficult to apply to other situations (Foerde, Knowlton and Poldrack, 2006) Normal text, normal text, normal text, normal text, normal text, normal text, normal text, normal text, normal text ...

## 7. DISCUSSION

This first survey has provided us with revealing results and has given us interesting clues on which to continue developing the line of research by proposing a larger questionnaire and a larger sample.

57% of students said they always use a laptop, tablet or some kind of electronic device in the classroom. Added to this figure the 30% who responded "habitually", there is only 13% who opt for the traditional method of paper and pen. Also, half of them claimed to always use their own device, together with 43% who stated that they always use their own device, except in those subjects of the degree where the faculty itself, by the requirements of the subject, provides them with the required computer and software .

As for the reason why students come to class equipped with their own laptop or tablet, 87% argue that such devices are necessary to take notes. 40% of the respondents also indicated that they could do work and practice in breaks and at the end of classes. Also, 20% acknowledged that they preferred to go to class with their computer to be able to "disconnect" from the activities developed in classrooms when classes seemed boring.

The fact of having an electronic device is not, a priori, the fundamental reason for distraction. The 47% percent of the students affirm never to have used a computer for purposes or tasks different from those proposed by the teacher for the class, if the computer was of the university. However, when students bring their own devices, this figure plummets, and everyone recognizes that they have used their own computer or tablet for tasks outside the academic activity. Among them, some can be considered useful, such as looking for data or curiosities in relation to what was being discussed in the classroom (67% with their own computer, but this figure drops to half of the students surveyed when the device belongs to the university), but most have disconnected from the activity of the seminar or master class to carry out pending tasks of that or another subject (66% with their own computer, 3% when using the university's), check the mail of the university (56% and 13%), check their personal email (70% and 17%), review their profiles in social networks (77% and 13%), order or review documents such as images or videos (43% and 10%), Read the online press (50% and 13%), visit online stores and even make purchases (30% and 3%), communicate with another student present in the classroom using messaging systems (40% and 7%), communicate with people who were not in the classroom (43% and 7%) or watch long videos such as movies, concerts, matches, series, etc. (20% with their own computer, none with those of the university)

Despite this apparent dispersion, the students consider that their use of these devices is "minimum" (40%), and 6% consider that it only "in emergency situations"

(defined as such "I have not had time to finish a job that I must deliver it in the next class"). 40% of respondents recognize that they are disconnected from the class "frequently," and 10% confess that they often spend distracted whole classes with their computer or tablet and ignoring what is taking place in the classroom.

Following with the impressions of the students, it is striking the analysis of the obtained answers. As advantages of the use of electronic devices in the classroom, students consider that they are more efficient in taking notes, as expressed by 53% who strongly agree with this statement, and 30% who are "quite in agreement". Even to a greater extent, they believe that thanks to the use of these devices, it is easier to access documents and work materials offered by their teachers (73% strongly agree, 20% enough). Most do not believe that computers or tablets distract them when they work in teams (73% disagree), or that in taking notes with computers they retain less information than doing it by hand (33% strongly disagree and 17% disagree, although another third of the students are not clear and 17% think that it is retained less than with the paper notes "of all the life"). Nor do they believe, or at least they do not confess it, that the use of such devices influence the increase of plagiarism in works and practices, despite the facility to copy and paste directly from a web page to their document.

However, more than half recognize that having a computer in the classroom makes it "very tempting" to be distracted in class, and 30% acknowledge that digital devices facilitate classroom attendance, as they can be physically present in subjects that they find boring but mentally absent due to the distraction and entertainment they get from their laptop or tablet, and even almost one out of every five students acknowledges that at some point their behavior has been recriminated by being "caught" by a teacher in the classroom performing tasks outside the classroom. Also, one of the most worrying data is that one in every two students considers that they no longer need to worry about spelling, because "the corrector is already in charge of it."

## 8. CONCLUSIONS

The current university students, belonging to the so-called Generation Y or Millennials, are a generation born and developed in a digital world. This implies that the way in which they communicate and learn is far from what we have experienced in previous generations.

University teachers have tried to overcome the differences in channels, codes and contexts preferred for communication, adapting to the requirements of students, and also trying to integrate Information and Communication Technologies in our day to day. There is no doubt that this process can help us to reach the objectives of the EHEA, forming a generation ready to continue learning throughout their lives.

However, in this process, a key player seems to have been forgotten: the student. If it is traditionally reactive to many of the processes and teaching methods, the use of the devices and resources that technology provides, despite bringing obvious

advantages, can increase the gap between motivated students and those less interested in making the most of its university stage.

There are already several studies that indicate that the use of electronic devices in the classroom encourages certain risks and generates clear disadvantages in the learning process between current and former students. In the study carried out among students of Communication degrees, it is evident that the use of such devices offers fundamental advantages such as a more efficient (and in their opinion, no less effective), quicker access to complementary information regarding those received in the classroom, and better contact with teachers. However, it is also a worrying percentage of students who acknowledge that the use of such devices encourages the "temptation" to remain in the classroom unrelated to the subjects dealt with in the same - in fact, they recognize that they have used such devices for tasks such as consulting E-mail, social networking profiles, visiting online stores and even watching videos during classes - and also students who think spelling is something you should not worry about since there is already a spelling checker in their text processor.

The "democratization of knowledge" brought about by information and communication technologies is, in an important part, misleading. There is a knowledge that requires certain procedures to be transmitted, and the teacher knows how to do it in the best way possible. However, much information around this knowledge may be available on the web, in a form accessible to students in the classroom itself. Thus, the critical ability to compare the validity of one informational source against others is lost, and it does not matter to lose the teacher's explanation if Slideshare, the Corner of the vacant or Youtube can offer information on the same theme.

Access to information concurrently with other tasks may influence the ability to set the acquired knowledge. If the student is not aware of the importance of the correct use of written language, or the ability to analyze and synthesize information, he may face serious problems, not only in his formative process, but also in his professional future.

The first data obtained in this study invites us to deepen the knowledge of the risks that the use of resources and technological devices imply for the students. Knowing the opinions of teachers and employers can also be a fundamental next step.

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## 9. APPENDIX

Questionnaire questions related to the use of electronic devices in the classroom.

Do you use a computer or tablet during classes?

Always

Habitually

Occasionally

Hardly ever

Never

When using a computer or tablet in class, please indicate with which of the following situations you identify the most:

I always use my own computer or tablet

I use my own computer or tablet except in matters where we have devices of the university

I use devices that belong to the university although on some occasion I have brought my own

I use devices only when the university offers them

I never use electronic devices in the classroom

Indicate which of the following are your motivations for using a computer or tablet in class:

I use the computer or tablet because it is essential for tracking a subject (for example, because we use a specific software)

I use electronic devices to take notes

I use electronic devices to perform work in breaks between classes or at the exit of classes

I use electronic devices in the classroom because they allow me to "disconnect" at times when I get bored in class

Please indicate if you have used YOUR OWN COMPUTER or TABLET for purposes other than those requested in the class:

I have never used a computer or tablet for tasks that were not of class during the hours of the same ones

I searched the computer or tablet for information related to what was being discussed in class

I have taken advantage of to carry out tasks of that or other subjects

I took advantage to check the mail of the university

I took advantage to check my personal mail

I consulted my profiles in social networks

I have used it to perform personal tasks such as sorting documents, searching for information ...



I have browsed the internet to read online press, blogs or other informative formats

I have browsed the Internet to visit stores or pages of different brands

I have communicated with people who were in the classroom and also connected

I have communicated with people who were not in the classroom

I have taken advantage of access to long-term audiovisual content such as videos, films, series, sports, concerts, music, other content in streaming, etc.

Please tell us now, when you use the computer THAT FACILITATES you in the classroom, have you ever used it for purposes other than the teacher's request?

I have never used a university computer for non-class assignments

I searched on the computer or tablet for information related to what was being discussed in class

I have taken advantage of to carry out tasks of that or other subjects

I took advantage to check the mail of the university

I took advantage to check my personal mail

I consulted my profiles in social networks

I have used to perform personal tasks such as sorting documents, searching for information ...

I have browsed the internet to read online press, blogs or other informative formats

I have browsed the Internet to visit stores or pages of different brands

I have communicated with people who were in the classroom and also connected

I have communicated with people who were not in the classroom

I have taken advantage of access to long-term audiovisual content such as videos, films, series, sports, concerts, music, other content in streaming, etc.

Please tell us now, when you use the computer THAT FACILITATES you in the classroom, have you ever used it for purposes other than the teacher's request?

I have never used a university computer for non-class assignments

I searched on the computer or tablet for information related to what was being discussed in class

I have taken advantage of to carry out tasks of that or other subjects

I took advantage to check the mail of the university

I took advantage to check my personal mail

I consulted my profiles in social networks

I have used to perform personal tasks such as ordering documents, searching for information ...

I have browsed the internet to read online press, blogs or other informative formats

I have browsed the Internet to visit stores or pages of different brands

I have communicated with people who were in the classroom and also connected

I have communicated with people who were not in the classroom

I have taken advantage of access to long-term audiovisual content such as videos, films, series, sports, concerts, music, other content in streaming, etc.

In general, and for most subjects, you consider that the use you make of the computer or tablet in the classroom for tasks other than those corresponding to that class is ... (choose the option that you are most in agreement with)

I never use a computer or tablet for tasks other than those proposed in the classroom

The use is minimal (for example, while the teacher distributes an exercise or opens a document in his computer)

I have only done it in cases of urgency, for example if the next hour had to deliver a job that had not had time to do

I often do this to disconnect at certain times of the class

I often do this to disconnect at certain times of the class, and very often I end up passing the whole class distracted @ with my computer

To conclude, please let us know if you agree with the following statements:

(Strongly agree, strongly agree, neither agree nor disagree, disagree, strongly disagree)

The use of the computer or tablet in the classroom helps me to follow the classes better and be more efficient taking notes

Thanks to the use of the computer or tablet in the classroom I often access material provided by the teacher, or news and information related to what we work in the classroom

Using a computer or tablet makes me more distracted, it's very tempting

I have sometimes been called attention to use the computer or tablet for a purpose other than the class

Thanks to the computer or tablet I can be present even in classes that are very boring but doing what I like

The use of a computer or tablet makes it worse use the times of teamwork because in the end we end up distracting with other topics

The use of computer or tablet makes it retain the knowledge worse than when I have to copy by hand

The use of computer or tablet makes me shop to copy and paste a lot of information obtained from the Internet in my works

The use of a computer or tablet makes me not worried about spelling because the corrector is already in charge of it