



The student and the active classroom configuration: Itinerary, learning and research

El estudiante y la configuración del aula activa: Itinerario, aprendizajes e investigación

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Abstract

To build a learning space in university education, a series of teacher skills is required, as well as active student participation. Innovating and transforming the classroom is complex, because the concurrence of skills among educational agents is necessary. The active classroom requires students to play a leading role in their learning, where the teacher is the mediation strategist. The objective of this article is to share the pedagogical itinerary that a group of students from the Quantitative and Qualitative Research Techniques in Communication course lived, based on consensus with their teacher. The one narrated here, is not properly the result of an academic investigation, but of an exercise of descriptive and purposeful analysis in which the intervention methodology used in the classroom and outside it is addressed, when presenting the pedagogical strategy, the way in which the students participated in the definition of an agenda to address the curricular contents of the second part of their course, corresponding to qualitative research techniques. From the achievements and results obtained by the students, the relevance of involving them as active subjects of their own learning is concluded, by helping to define their educational itinerary, in which virtual platforms, reference sources in multiple formats, the use of software and applications to produce evidence of learning.

Keywords: Learning, research, strategies, teaching, mediation, ICT.

Resumen

Para construir un espacio de aprendizaje en la enseñanza universitaria, se requiere una serie de habilidades del profesor, así como una participación activa del estudiante. Innovar y transformar el aula es complejo, porque son necesarias la concurrencia de competencias entre los agentes educativos. El aula activa requiere de los estudiantes el protagonismo en su aprendizaje, donde el profesor sea el estratega de la mediación. Es objetivo de este artículo, es compartir el itinerario pedagógico que un grupo de estudiantes del curso *Técnicas de investigación cuantitativa y cualitativa en comunicación* vivió, a partir del consenso con su profesor. Lo aquí narrado, no es propiamente el resultado de una investigación académica, sino de un ejercicio de análisis descriptivo y propositivo en el que sí se aborda la metodología de intervención empleada en el aula y fuera de ella, al presentar la estrategia pedagógica, la forma en que los estudiantes participaron en la definición de una agenda para abordar los contenidos curriculares de la segunda parte de su curso, correspondiente a las técnicas de investigación de corte cualitativo. A partir de los logros y resultados obtenidos por los estudiantes, se concluye la pertinencia de involucrarlos como sujetos activos de su propio aprendizaje, al contribuir en definir su itinerario educativo, en el que se emplearon plataformas virtuales, fuentes de referencia en múltiples formatos, el uso de software y aplicaciones para producir evidencias de aprendizaje.

Descriptores: Enseñanza, investigación, estrategias educativas, docencia, mediación educativa, TIC.

1. Introduction

The narratives that characterize the theoretical properties of the contemporary educational landscape present the role played by educational innovation, highlighting the configuration of educational environments that favor learning-focused teaching. It is said that the professor should assume a new role as facilitator, for which he/she must acquire and develop disciplinary competences, as well as others related to pedagogical and communication (MEN, 2013); which can promote the reinvention of the classroom, based on strategic management that measures the teaching-learning-evaluation process.

In the academic discourse, the reasons and the rationale behind the debates come from the recognition of the challenges posed by the world lived today as the cause of globalization and became the emergence of an education focused on skills development. In this scenario, the need to reform the education promotes curriculum innovation, the change in pedagogical models, provide technological infrastructure for educational institutions, train professors, being demands and commitments of educational institutions.

Proposals for this paradigm shift mostly focus on basic education, leaving the other levels behind, where transformations occur as a result of the situation that entails all transformations into an educational system. At the higher level, the institutions must find the mechanisms to implement the required changes, once education policy and regulatory bodies (national or supranational), have confirmed or promoted the relevance of transforming education to meet the challenges of the professional market.

The aim of this paper is to present an educational itinerary lived by a group of university students who, after a collegiate agreement, defined the agenda to finish a course aimed at learning, acquiring knowledge and skills related to the planning, design and use of qualitative cutting research techniques in the field of communication. In doing so, it is hoped to contribute

to the reflection and analysis that can be drawn to give viability to teaching innovation, based on the configuration of educational environments that seek to improve the learning of young university students based on their expectations, without betraying what should be promoted in the curriculum to contribute to the disciplinary profile of those who are about to graduate.

2. The theoretical dimension of the topic

Revising the specialized literature allows to understand that a theoretical frame has been created in the field of educational innovation, intertwining narratives ranging from the beginning of the twentieth century to the thresholds of the 21st century, which is a timeline that allows to recognize authors who have contributed to contemporary education: From Vygotsky (1896-1934) to Bandura (1925-), Piaget (1896-1980) to Morin (1921-), from Bruner (1915-2016) to Maturana (1928-) and Varela (1946-2001), epistemologists, theorists, scientists who have helped define educational paradigms with their contributions.

If the sociological and anthropological aspects are added to this, one has the possibility of understanding the arduous and complex paths of the professor, who has the dilemma of training a generation of students who - not always - find in their professor the authority role; an additional problem to the professor is the role of mobile devices today and, specifically, social networks that seem to recreate the social life, link and represent the world they inhabit.

University students have been a user profile that makes teaching difficult if—as they say—the attention in a classroom has been significantly reduced because of video games, new media consumption experiences on *streaming* platforms; extreme confidence in influencers and youtubers, dangerous humorous reductionism represented by memes, all this being a type of communication that privileges instant messaging and social media over other communicative practices.



While it is unquestionable to accept that thanks to mobile technology, there is greater access to diverse content, because as UNESCO points out, even though cell phones are almost always used to communicate, “they are also, and increasingly— a gateway to large texts” (2015, p. 13), reducing their costs when compared to printed editions; while acknowledging that a cell phone easily reaches remote places where a book hardly does (UNESCO, 2015). However, this condition is linked to variables such as the type of technology available, access to the Internet, as well as the education of users and their conditions for searching and downloading digital content; which does not prevent the understanding that: “The use of mobile devices in education is a fundamental element in the construction of knowledge, since the possibilities of interacting are increased, and communication is improved” (Elguea, 2014, p. 7), favoring the breaking of barriers between teachers and students.

The information and knowledge society (IKS) distinguishes for the same reason; which does not prevent us from accepting that in the classroom, technology can be a driver and can hinder the attention of university students. While as Alonso states (2017), that there are no studies that certainly demonstrate student’s attention times, it can be accepted that it is usually less than that of other times.

There are experiences such as those in France, where the 2018 school law banned the use of cell phones in schools at the upper middle and middle level (between 15 and 18 years of age), a law that confronted detractors and advocates of this initiative, the latter being the ones who claimed that “the use of telephones has a negative impact in the attention of the class, the school environment and reduces physical activity in the courtyards” (AFP, 2018 para. 5). In any case, access to technology— as always, is complex, and the truth is that ICTs are sociocognitive extensions, so it is necessary to continue thinking about their place in an educational context.

Additionally, the consumption and the ephemeral (Lipovetsky, 1996, 2007; Lipovetsky & Serroy, 2015), often forces the professor to design a learning environment: College students assume the here and now as a vital, almost unique condition, rather than thinking about their professional future, so it is often common in university classrooms to see habits of the disinterest and disorganization typical of a generation of students.

This psychosocial dimension becomes complex when in classrooms a high percentage of university students stop taking notes and show inability to use resources learned in middle education, such as: Conceptual maps, synoptic tables, schemes, among others; not to mention that the work in the classroom can wait a few minutes in its beginning, until the professor establishes the criteria for the use or not of the cell phone in the class, because it is hardly the young person’s will to stop using it.

Communication and pedagogical management play an important role in that moment, being resources that a university professor must use when his or her presence does not necessarily guarantee a status of authority. These two resources are important in teaching, when they are understood as competences that characterize the professor of the XXI century. Alongside this, the understanding to recognize that the variables previously described in relation to young people are part of the identities and properties that define the university student.

The new teaching skills combine disciplinary knowledge that allow it to be enabled and know how they can be used to design strategies that measure the student learning; these are “knowledge, skills and attitudes” to facilitate the student learning, to “design work plans, recognize the characteristics of students, innovate in their practice, evaluate teaching and learning processes, and build learning environments” (SEP, 2017, p. 202). In this regard to these competencies, León-Rodríguez states that “the new role of the professor requires new functions such as being a guide and facilitator of resources for



the education of students participating in their Own learning process”, where the work he/she does as a facilitator implies “a wide range of information and communication tools currently available and increasing” (2017, p. 30).

In this context, communication is a competence that “assumes the knowledge of the language system and verbal and non-verbal codes and the adequacy of linguistic action to different contexts and communicative situations” (Angulo-Marcial, 2017, p. 92); so in the classroom, the professor must make use the oral and written registers to inform, but also to interact, to nuance what is communicated from the recognition of sociolinguistic heterogeneity that distinguishes students, not only because of their codes used, but also because of the multiple intelligences, the different learning styles, the diverse and asymmetrical that distinguishes university students in the cognitive field.

Behold, the work of pedagogical management can be as arduous or difficult as the attributes that distinguish the teaching practices, because this student heterogeneity is among the professors. For this reason, it is said that a university professor must also incorporate research into the teaching work, to promote a better understanding of those problems typical of education, sometimes circumscribed, but in others overwhelmed by multi realities, as they may be social, economic, cultural, even historical.

The importance of developing digital skills among students as well as in professors is considered. Starting from the understanding that, as social subjects, both have incorporated technologies into their life, enabling their daily use, not guaranteeing that such skill, facilitates their educational use. Hence, educational institutions must contribute to the development and underpinning of skills and knowledge related to information and communication technologies (ICTs).

Updating or training professors in the educational use of ICTs, enabling them in the digital resources, in the production of teaching materials that allow them to diversify their methodologies or teaching strategies, is not always easy but cer-

tainly necessary; challenge that universities face, understanding fears, uncertainties, anxieties, or inability that are often seen when taking or teaching ICT training courses in teaching.¹

In narratives for educational innovation and the transformation of teaching at the higher level, a series of premises are promoted that seek to understand and implement changes in the ways of conceiving teaching itself. Pedagogical knowledge is incorporated, favoring the disciplinary content, competences that facilitate the implementation of learning environments that make the classroom a dialogical and open space.

When talking about teaching in the context of educational innovation as the use of ICT, one can talk about the development of a set of technological and communicative skills; pedagogical skills and a management ability to complement them with investigative competence. Authors like Sunkel et al. (2014); Torres Rivera et al. (2014); Pozos-Pérez and Tejada-Fernández (2018), and bodies or agencies such as ANUIES (2019), for the case of higher education in Mexico or the Colombian Ministry of National Education (MEN), when talking about skills technologies, relate them to “select and use in a relevant, responsible and efficient way a variety of technological tools understanding the principles that govern them” (2013, p. 31). The communicative field conceives them to “the ability to express, contact and relate in virtual and audiovisual spaces through various means and with the management of multiple languages, synchronously and asynchronously” (2013, p. 32); therefore, the professors are asked to be trained to incorporate technologies into their teaching processes to promote the integral training of students, as well as “their Own professional development” (2013, p. 32).

It is interesting the place of pedagogical management by focusing on the ability of professors to use ITCs in the process of “planning, organization, administration and evaluation” of the teaching-learning process, “both at the level of pedagogical practices and institutional development” (2013, p. 33). Finally, it is said that



“Research can be thoughtful by researching the same practices through the observation and systematized recording of experience to self-assess and propose new strategies” (MEN, 2013, p. 33), competence which, together with the use of ITC, can contribute to the transformation and “generation of new knowledge” (2013, p. 33).

The writer considers that the Colombian body presents a number of relevant or acceptable competences for those who are university professors and have sized the new responsibility of being a professor at the higher level, where disciplinary knowledge is no longer sufficient, but also those that facilitate a more effective mediation of the educational process: Communicative to make the classroom a dialogical space; research to know the objects of study and their forms of methodological approach, where the pedagogical and efficient management would favor the configuration of learning environments.

The university professor must be a manager of educational processes, of curricular content through analog and digital resources that help in the training and preparation of their students; in the acquisition of skills that allow young people to develop knowledge related to their disciplinary field. In this perspective, disciplinary research should be an area in which the university student is also prepared being that, depending on the training discipline, it will be the place the student will work.

In the cross-sectional as in the curriculum, the professor must size his/her role as a facilitator of research powers at the university level. From the transversal point of view, know the properties that an activity must have to conduct the consultation and specialized sources for the elaboration of learning evidence. In the curriculum, to promote a set of knowledge and skills related to the construction of disciplinary study objects.

While there is a lot of literature that can help to understand the methodology of investigative processes (Gil-Villa, 2013; Gobato, 2013; Mendieta-Ramírez, 2015; Serafini, 2019), including articles on teaching research at the university (Saavedra-Cantor et al., 2015; Lorenzo, 2017;

Flores-Osorio, 2018; Böhm-Carrer & Lucero, 2018), professors not always have an investigative experience to translate, deal with theoretical and methodological content that motivate the research spirit in young people, who do not always find meaning in why to learn to research.

This is the disciplinary craft, the pedagogical ability to mediate with multiple resources and teaching materials that allow to recreate — collaboratively — curriculum contents for an active classroom. When talking about a collaborative space, reference is made to a pedagogical intervention where the socio-emotional and practical promotes student-centered teaching, in which the professor implements activities that affect learning, through multiple resources that contribute to cognitive development and the active participation of students, where ICTs can facilitate the appropriation of information and knowledge-achievement through various activities promoted by a professor committed to his/her task.

The experience of a pedagogical intervention strategy is then shared, which helped to activate new prominences among educational actors, particularly in the study of a university course that endorsed a teaching proposal to decide how they wanted to address the last part of a school year, where they would have to plan and design qualitative cutting research techniques.

3. Methodology of the pedagogical strategy

Making the classroom an active and dialogical space is not usually common from the experience of the writer. Recognizing a student as a leading subject in their learning is not always revealed in a course. Even with the above, it is possible to recognize paths and tactics that allow the professor to implement activities where the student makes the decision of what, how and where to learn. Below is the design of a strategy in which the students were responsible for their learning.

Quantitative and qualitative research techniques in communication, is an educational experience² that is part of the curriculum



of the degree in Communication Sciences of Universidad Veracruzana (UV), course that integrates the curriculum line of research³ and seeks the theoretical-methodological and disciplinary training of the student; subject that faces the challenge of bringing students closer to research in Communication from a teaching work with diverse profiles and trajectories, which affects the perception or conception that young people have about research training.

It was in this context that, in the second part of the course, students were asked to decide how observation and qualitative interview (as well as two complementary techniques: one quantitative and one qualitative) could be Addressed. Here the previously integrated equipment for the design of quantitative techniques was ratified. To facilitate the process, the following indicators were established: a) Research Techniques, b) Reference Sources, c) Teaching Material, d) Activities, (e) Learning Evidence and (f) Complementary Techniques.

The methodology for the implementation and monitoring of activities consisted of 4 steps or moments: 1) Organization of work teams: The group composed of 43 students was organized

into 8 working groups, composed of 5 students on average; (2) Conditions of implementation: General instructions on activities were agreed in the classroom, these were described on the EMINUS institutional platform, as well as the delivery of the learning evidence at the agreed stages; 3) Activity follow-up: Teams started their activities in the classroom, where they were fed back by their professors, and then he activities were uploaded to the EMINUS *Activities* folder for the final feedback. Having done this, the delivery was recorded in the *Evaluation* folder; 4) The evaluation of the work: The *Evaluation* folder described the instructions for the delivery of each work, where the rubric that the platform itself allows to design was visible to be used in the evaluation of each evidence of learning. This methodology favored the conditions of collaboration, co-responsibility and transparency of the teaching-learning-evaluation process.

Each of the teams delivered their proposals in a matrix that was revised and agreed on to address the qualitative techniques of the course program, such as the complementary proposals. The following table shows what was agreed.

Table 1. Proposed activities and products to address qualitative research techniques

Investigation techniques	Didactic material	Activities	Learning evidences
Ethnography/observation	<ul style="list-style-type: none"> Tutorial Presentation of the topic Movie streaming Use of the blog 	<ul style="list-style-type: none"> Reading of specialized sources Analysis of the firm Definition of the topic and time to observe Use of online forums 	<ul style="list-style-type: none"> Elaboration of an ethnographic work centered on the observation Elaboration of a resport based on the guidelines presented by the professor
Interview	<ul style="list-style-type: none"> Presentation using Prezi Streaming of an interview and it different types Use of the blog 	<ul style="list-style-type: none"> Revision of tutorials Definition of the interviewed individual* Planning and design of the interview guideline Use of online forums 	<ul style="list-style-type: none"> Interview Presentation of the interview in a video or podcast



Investigation techniques	Didactic material	Activities	Learning evidences
Discussion groups	<ul style="list-style-type: none"> Presentatio in <i>Power Point</i> 	<ul style="list-style-type: none"> Revision of specialized sources Planning of a discussion group 	<ul style="list-style-type: none"> Creation of a discussion group
Experimental design	<ul style="list-style-type: none"> Conversation in groups about the topic 	<ul style="list-style-type: none"> Conversation with a specialist 	<ul style="list-style-type: none"> None evidence was planned

* Note: The interviewed should have known the problem, to relate the observation to the interview as ethnographic resources

Since it was explained how important the development of disciplinary, pedagogical, communicative, investigative, digital and management skills are, the students' proposal was broad and diverse to reflect on what was required. Thus, the UV EMINUS platform was used as a hub of operations.

Figure 1. EMINUS, educational platform of Universidad Veracruzana



The basic premise was the opportunity to link the classroom to physical and virtual environments because of the type of activities proposed, the suggested educational resources and the teaching material to be used. Recognizing that not all students often work in “pairs”, criteria were established and rubrics were designed to weight each product. In the context of the instructions, EMINUS was established as the site to present the evidence of learning, while, on the blog a text was published with instructions to guide the activities; so each student had to read it to know what to deliver individually and what as a team.

From the institutional *blog* of the professor it was possible to migrate to other sites where students could consult selected academic sites, view tutorials or material related to qualitative techniques, and know the instructions to participate in the virtual forum. The instructions: Each student would plan a topic, perform the protocol and agree on the topic they deemed viable and relevant to develop in the context of their learning. Hence, all students would live the same path to achieve the learning goal: To plan, design and execute qualitative cutting research techniques.



Figure 2. Academic blog of the professor



4. Strategy results

The first technique was the observation, first making the appropriate notes so that the use of this resource was understood in the context of broader work such as that required by ethnography, being that it is not a technique but a method

or methodology. Following the interview with a YouTube specialist, the literature was presented and consulted to plan and design a protocol that students should provide, composed of photographic evidence, cartography, vignettes or accounts of what was observed. Two evidences can be found in the following images.

Figure 3. The podcast: Evidence of fieldwork



For the interview, the students proposed to present them on video or *podcast*, based on the use of *software* and an application that did not require a sophisticated technical mastery

for the conduction, since it was not the objective of the course. For the *podcast*, the students were requested in the classroom to download an application that they should use on their cell



phones. The product that would be nested on the application site and shared in EMINUS. Whether on video or on the *podcast*, teams should present the evidence in an edited product that would not exceed 10 minutes. For the video version, it could be shared from YouTube channel or another site that would allow to link it to EMINUS.

Throughout the last month and a half of the course, students were able to demonstrate that they can be active subjects when there are conditions to. The classroom was a decision-making place. It came to life and became a collaborative and interaction space, based on the will and initiative of the young students who decided the methodology of the active learning, both for those techniques that were required in the program, as for the complementary ones.⁴

The results were broadly favorable: 7 observation papers allowed to assess whether students had understood how these research techniques are planned, designed and executed from the qualitative approach. 5 *podcasts* and 2 videos were resources to present the interviews conducted.

5. From the analysis

It could be noted that, in the execution of techniques and how to meet the delivery criteria, not all students follow the instructions as provided, even if they are told the pedagogical importance in meeting each criterion.

The opening of virtual forums to facilitate the participation of those who usually have a low profile in the classroom (in the opinion of the students themselves) facilitated to recognize their voices, but there was also a problem in handling and appropriating theoretical information in the context of a discussion, as well as to

incorporate them correctly as reference sources to their written documents.

Planning and designing activities from constructivism at the university level is often arduous for the preparation and investment of time, energy and intelligence; hence, it usually refers to an educational itinerary that starts in the classroom, bases on the daily-bases, and links to other environments such as virtual ones; decisions that allow to set up multi-determined learning environments, different from traditional ones.

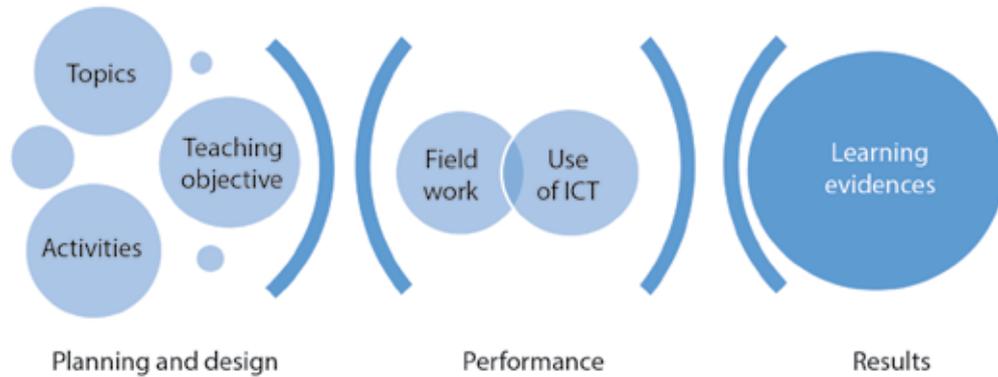
Thus conceived the classroom, it becomes an active and alive place by the way that educational agents share decisions, promote another type of role, where the professor communicates, manages, makes ITC resources to mediate and accompany the expectations of university students, who appropriate and produce evidence of learning from an active role.

The conduction of empirical activities outside the classroom to address the themes (phenomena or communicative problems) through observation and interview made the spaces of observation and dialogue with the subjects interviewed as a local learning. There were even groups that took advantage of the holiday (the day of the dead)⁵, to carry out their work in some locations where this festival is particularly significant. These experiences required the use of software to make videos or applications to create a podcast and share the learning evidence in EMINUS.

Among the most significant products was the interview with an artisan who designs folk masks, as well as the work on the use of mobile technologies in public spaces of the Veracruz-Boca del Río urban area. While there were observations in both papers, it should be recognized that students' evidence reached a level of experience of those living in communication research.



Figure 4. Model of the educational itinerary for an active classroom



6. Some conclusions

Facing the challenges of the XXI century education is complex if one recognizes the blurring that teachers have, who must train young people challenged by a highly technological world, in which social media, entertainment, fun and leisure are often common places to self-define.

Hence, the professor is required to have a range of different competences that allow him/her to manage the heterogeneity of any group of students. The conceptions of the role of the professor have changed. Today they are facilitators of

processes, to make the student the protagonist of their Own learning.

As a pedagogical and disciplinary resource, research broadens the horizons from which to understand and size the educational phenomenon. This paper has reflected on this, but an experience has also been shared where students decided, agreed and proposed how they wanted to approach two qualitative cutting research techniques. The execution of one and the other was an interesting experience because of the phenomena or problems addressed, as well as the quality of some evidence that was presented through videos or podcast.

Figure 5: Graphical resource in an observation protocol



What was done in the second part of the school year August 2019-January 2020 was undoubtedly significant. This leads to highlighting the need to size the role of the professor when designing learning environments by implementing activities that can transform the classroom into a space linked to the daily life of students. If, as it is said—teaching must be positioned for knowledge to reach the favorable thresholds of meaningful learning—it is up to the professor to be the one who plans and designs strategically, giving students a voice so that together they may find conditions that lead to novel educational itineraries.

In the disciplinary, pedagogical, communicative, research and management aspects, there are some competences that university professors must acquire, not only because supranational or national bodies propose them, but because there is empirical evidence and academic experiences that have been showing the ways to transform the teaching practices.

Thus, the classroom can no longer be a space for the reproduction of information, instead it must be a place to recreate the education, and recreating means to make that space an active dialogical experience.

Notes

- 1 The author has had the opportunity to design and teach courses for higher education teachers: one aimed at the production of teaching materials for research teaching and the other for the development of teaching skills for research teaching.
- 2 The Integral and Flexible Educational Model (MEIF) of Universidad Veracruzana states that an educational experience must be understood “not only as the one carried out in the classroom, but as the one that promotes learning, regardless of the field in which it is carried out” (UV, 1999, p. 33), since this contributes to the integral, professional, social and personal training.
- 3 The courses that define this line are: *Methods of Social Sciences, Quantitative and Qualitative Research in Communication and Reception Experience*.
- 4 For the experimental designs, a specialist from the faculty of UV Psychology was invited, theoretically and technically clarifying that an experimental design was not properly a research technique. For the discussion groups, a specialist could not be counted on, so the technique was presented and an exercise was implemented in the classroom, the proposed theme of which was: ITC and sexuality among university students.
- 5 Ancestral holiday that takes place in Mexico on November 1 and 2.

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