CELLPHONE USE AND TECHNOLOGICAL APPROPRIATION AMONG HIGH SCHOOL STUDENTS IN JALISCO, EDUCATIONAL STRATEGIES AND TIES BETWEEN FORMAL AND INFORMAL EDUCATION WITHIN A SCHOOL RANGE

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ABSTRACT
Cellphones are considered a convergent technology since their use goes beyond making a simple phone call, they are smart phones used as technological devices that have a series of applications as well as Internet connection. The use and appropriation of cellphones, consequently, require a series of learning and competence that is generated which goes beyond the instrumental use, since they place the user before another type of cognitive and symbolic learning that, in many Sometimes, they are not valued in other social areas (for example, the school), generating a false belief that when using and appropriating the cell phone, nothing is being learned. This research intends to know and analyze if high school students develop some type of learning with this mobile technology and if these learnings can link them with what they learn in the school environment.

KEYWORDS
Cellphone, Students, Learning, Strategies, Educational

1. INTRODUCTION
Last March 7th, a current High School Number 10 student of the University of Guadalajara published on social media a video he had previously recorded during a class where a teacher used a foul and misogynistic language to give examples on the subject he was addressing; said video had been edited by the student to only present fragments of the session, in such a way that the audio seemed a reprehensible act on the part of the teacher when using that type of language in the classroom and during a class. The video went viral in such a way on social networks that even national and international media talked about the case. The previous situation evidenced the need for a program of media literacy and ethical management of social networks for the university community, in addition to demonstrating that students have achieved appropriation of the cell phone to have the ability to plan the recording and, later edition of the video to publish it in the social networks out of context, causing the disqualification of the teacher.

As a result of this event, the University of Guadalajara headmaster declared that in view of the reality that in high schools and university centers, more than 90 percent of the students attend classes with their smart phones, the Normativity Commission of the General University Council studies the releasing of a regulation that establishes clear rules on the use of electronic devices in classrooms (Pérez, 2017). It is important to note that prior to this event, the internal regulations of the high schools already established the condition that the cell phone can be used in the classrooms only for educational purposes; but, you might think, what are those educational uses to which the regulation refers? since the fact that it was news shows that the student "knows" to use the cell phone to "create" videos and publish them, did he learn that in high school? In what class did he learn to do it? They also taught him the ethical management of social networks, but he forgot?

The reality is that even though the use of cellphones in classroom is prohibited by rules and regulations, students will use them for educational purposes or not. It is why that the present investigation pretends to know the diverse educative strategies that young high school students use in order to build bridges between
informal learning that they develop with and through cellphones and formal learning that they acquire at school. How students recover or can recover skills that they have developed with the use of cellphones, and even appropriation that they have achieved from cellphones to tie them with what is learned in classes of the educational high school program.

For Katz (2003), cellphones have turned out to be machines and such machines have become us; They are gadget-technology that goes beyond being a tool or gadget, for the author could be a represented of oneself. Young High School 10 students are not exempt from the influence and the widespread use of cellphones, that is why the present investigation intends to know in first instance what are the uses that such students give to such cellphones, as well as the appropriation that they give to those, so we can later analyze what they have learned with the use and appropriation of cellphones and what ties them with their formal learning development at school environment, in other words, what are the implications of cellphone use to students in a school setting.

In this research we have chosen to select cellphone as the analysis technology, not only because of its convergent capacity -since it is a mean that contains others- but also because such technology is mostly used by young people. The National Survey of Audiovisual Content Consumption 2016, conducted by the Federal Institute of Telecommunications in Mexico, presents in its results that cellphones are the most used device to view Internet content, 70% of survey respondents, while 77% of Mexican households have a cell phone.

2. MAIN QUESTION

What are the uses and appropriations granted to cellphones by High School 10 students of the University of Guadalajara and what educational strategies do they create to link the formal and informal learning within the school environment?

2.1 Prompt Questions

- How do High School 10 students of the University of Guadalajara create educational strategies in order to tie what is learned through cellphones with formal learning what is taught in classrooms?
- How have High School 10 students of the University of Guadalajara taken appropriation of cellphones and how have they incorporated it into their school environment?
- What kind of meaning do High School 10 students of the University of Guadalajara give to cellphones and what kind of learning tools have they acquired through this gadget-technology?

3. OBJECTIVE OF THIS RESEARCH

Analyze and interpret the uses and appropriation that High School students of the University of Guadalajara have regarding to cellphones, as well as knowing and analyzing which educational strategies they create in order to tie what is learned with such mobile devices to the formal learning development in a school setting.

3.1 Specific Objectives

- Analyze the way in which High School 10 students of the University of Guadalajara create educational strategies in which they tie their technological appropriation of their cellphones to their formal learning process that is taught in the classroom.
- Point out and interpret the way in which High School 10 students of the University of Guadalajara have owned cellphones and how this has affected the incorporation of this technology in a school setting.
- Describe the meaning that they give to cellphones, as well as the learning process that the High School 10 students of the University of Guadalajara develop with this technology.
4. METHODOLOGY

4.1 The Method and its Methodological Decisions

It is by using qualitative research methodology that we are sought to acquire and analyze the uses and ownership given to cellphones by the High School 10 students of the University of Guadalajara and what educational strategies they create to tie the learning process that they can develop with it, and the type of learning developed in a school setting.

4.2 The Field of Study

Understand the meaning given to cellphones by the High School 10 students of the University of Guadalajara involving understanding of the symbolic value and the meaning of this object (already cultural) within their daily and educational practices and this implies necessarily the construction of a qualitative approach, since it is about making the object of study visible through the methodology.

4.3 Analytical Categories and Methodological Tools

This research intends to analyze and interpret the uses and appropriation that students have regarding cellphones, as well as the way in which such students use educational strategies to link what they learn in the school environment with the informal learning setting that they have developed with such technological tool.

In order to get to know it, we start from the categories proposed in the theory of technological domestication; which are: appropriation, which has to do with how and in what situations cellphones can take over a place in the lives of students; incorporation, aimed directly at the location and the role played by cellphones according to the needs, knowledge and preferences of the students; objectification, which refers to the cognitive and aesthetic values that give cellphones and how they acquire a place and a specific meaning in the lives of students; and, conversion, which implies the way in which cellphones are part of the image of the students and how they project a certain position with their possession and use in front of the other students.

Discussion groups are considered the most appropriate methodological tool, since by forming the group with young students who share age, tastes and interests, it will be possible to generate greater interaction among them, so that they can expand their knowledge to discuss the uses, appropriation and learning that they give to the cellphones; which is the objective of the present investigation. It is intended that among them, it will generate a discussion topic with their points of view and not that it is a direct group, that is why we opt for the discussion group as it is considered that this gives the participants freedom to express themselves as they wish.

4.4 Discussion Groups and Qualitative Interviews

What is this methodological tool about? For Chavéz (2013), the discussion group as a methodological tool comprises three stages, which are: preproduction, which includes the semantic field that determines the theme of the session and which is vital, since it defines the discourse produced around the conversation and that in the case of this research allows to recover the collective discourse of a specific generation that has grown with using cellphones. The first topic for this moment of the discussion group is taken from what was raised in one of the research questions and has to do with, in what way and in what situations do students use cellphones; according to categories of analysis of the theory of technological domestication, which will be help us to know the appropriation that High School 10 students give to those mobile devices.

A second stage of the discussion group is the construction of categories of analysis on global topics; the categories of analysis that are pre-constructed statements with the intention of obtaining the lecture on the part of the students; Chávez (2013) suggests that these statements are not explicitly imposed or stated, so that they do not interfere with the course that could take the conversation in the discussion group. In the case of the current investigation, the units of analysis or observables are: a) cellphones as a communication tools;
b) cellphones used as cameras; c) cellphones to connect to the internet and consult social networks;
d) cellphones to connect to the internet and search for information; e) cellphones to perform school tasks.

The aforementioned categories are aimed to providing information regarding the category of incorporation proposed in the theory of technological domestication, which has to do with the location and the role played by cellphones in the lives of students according to their needs, knowledge and preferences, as well as the development of invisible learning process in the High School 10 students of the University of Guadalajara, which according to the theoretical framework has to do with the ability to use the search engines on the internet, o the ability to interact in social networks; informal learning developed by the students with the use and appropriation of cellphones and, if they also use them to do homework, they would be making the connection with such school setting.

4.5 Detonators and Analytic Strategies for the Discussion Group

Regarding the third stage of the discussion group, for Chávez (2013), detonators are presented, which once they have triggered the discursive situation with the phrases or assumptions that are going to generate conversation, are thought-provokers of the lecture and represent the only tool that the researcher can use to intervene in the group's discussion, if he considers it necessary to motivate the participants to speak. For the case of this study, the first detonators to use are: a) what would they feel at the moment if they lost their cell phone? b) At the time of getting your cellphone, Did you consider any educational or learning criteria?; c) Do they use cellphones to carry out research and tasks assigned by teachers in their activities within the school?

With the first detonator that encourages students to discuss how they would feel if at that moment they lost the cellphones; it is intended that the answer or information that they provide on the subject, allows them to know the meaning that mobile devices have for them; since the empirical context tells us that cellphones are the most used technological tool by young people and, when questioning what would happen if they lost it, it would make obvious in their speech, the meaning cellphones have for them as an object. The above is related to the category of objectification, raised in a technological domestication, which has to do with cognitive and aesthetic values and the way in which mobile devices acquire a place and meaning in the lives of the High School 10 students of the University of Guadalajara.

4.6 Field Work

The first stage of the fieldwork was piloted by conducting three discussion groups, in which in one of them participate five students of the second, third and fourth high school grade-semesters who. The first discussion group was formed by four men and one woman, the invitation was opened and the participants decided to do it voluntarily.

The second discussion group was formed with students of fifth and sixth semester, conformed by three men and three women to whom the invitation was made to them and of voluntary they decided to participate. For the third group, the same amount of students is presented in terms of men and women, with six participants, all of them in the sixth semester. The three groups were formed with students from both the morning shift and the afternoon shift. The invitation was made to the students of these semesters since they attended the first high school semesters learning the subjects Information Technology I and II.

Being part of these organized groups with different students and different semesters to know how the interaction occurs and how much they express themselves to colleagues they do not know, but who are their peers in terms of age, educational level and in this case hobbies to use of cellphones, since all the participants have a smartphone. Of the three sessions one lasted about 50 minutes, and the other two 40 minutes.

As detailed in the methodological section, the group work dynamics of the discussion groups followed what Chávez (2013) proposed, regarding follow up and processes, while the categories of the questions or phrases were chosen so that triggered the discussion, they take up the processes proposed in the theory of technological domestication and invisible learning.

Regarding the field work carried out. It has been fascinating for myself on how the approach on high school students has been carried out and in this case being researcher and not a teacher makes a big difference, since it has allowed me to "see them in their own environment", listen to the talks outside the classroom, listen directly from their voice what it is like to actually own a cellphone, how and what they use it for, to hear their side of the story that some professors do not want to see a cell phone in their classes and,
on the other hand, they shared me how they manage to take photographs from the whiteboards so that they do not have to write on their notebooks what teachers have written down; but they also talked about how they use those photographs after and they share them through WhatsApp groups with the rest of their classmates.

All students talk about having created WhatsApp groups with their classmates and through that social network-app they ask and share what the teacher leaves for homework, updates on what the teacher can send them, those groups in the social network are only of students, except for what a fourth-semester student who shared an experience about a math teacher they had in the second semester asking them to create a WhatsApp group since that teacher missed a lot of classes and used the group of the social network to send them activities or tasks for when he did not attend those classes.

To the question expressed in the discussion group on how do they know that the information they get from the internet is correct in order to do their homework, the students point out that when they want to search for information on the internet they go to google and put the word and the information that appears check several pages, if they match then it’s true; Besides, when they arrive at school, they ask their classmates what they investigated and, if it coincides, then that is fine. This also speaks of the efficient use of Internet search engines, how students unknowingly create learning networks when they consult and contrast with their peers the information gathered from the Internet. In addition to selecting, discriminating and comparing the information that the search engine provides them.

By not seeing myself as an authority at all, as someone who can "affect" their grades for because of what they say or do, in some way allowing them to express themselves with greater freedom. For example, when they say they do not remember what they were taught in the Information Technology class, or that they did not learn anything; that something they saw something regarding a cloud or something like keeping information but that they do not remember, except one of them. Or, saying that the internet connection at high school 10 is very slow, that better they go to the library "that is on the other side" (Juan José Arreola Library), because there is a good internet connection.

Explanatory note: The field work carried out has been an actual approach to the proposed methodology, mistakes are acknowledged by analyzing that it was necessary to work on more detonators in order to encourage students to speak and explain their educational strategies, the centrality of what was done was in technological domestication. Therefore, it is expected to be resolved in the second stage of the fieldwork which will be carried out during the months of February and May of 2018 by using a greater creativity in the design of how to work the discussion groups with these high school students.

REFERENCES


