



## Problems and Challenges of Secondary Education in Mexico. an Approximation to the Variables Associated of the Interactive Relationships of Young People

Gustavo Adolfo  
León Duarte

Diana Elizabeth Moreno Carrillo Universidad de Sonora, México

### ABSTRACT

*The article presents the findings of the diagnostic between 2012 and 2014 about uses, attitudes, habits, skills and behaviors that present the young students of public secondary schools in the city of Hermosillo, Sonora (Mexico) with respect to technologies digital and portable device with Internet access. The study also discusses the results regarding the risks, their reaction to them and the habits or adopt security measures that youth or their parents and teachers in the use of these technologies. It is a research with externally funded. Use the critical multiplism as interdisciplinary theoretical perspective and methodological strategies that become an integrated mixed model for the analysis of cross-sectional data temporarily. Methodology involves two stages and a combination of quantitative and qualitative techniques. The quantitative analysis examined the application of 2907 questionnaires. The qualitative phase evaluated the implementation of seven focus groups. This article discussed some associated variables. Identifies and contextualizes the problems and challenges posed to Mexican high school.*

**KEYWORDS :** Education, México, Mobile Devices, Youth, Internet,

### I. Introduction

In recent years the research on the use and consumption of digital technologies by children showed an evident concern about the use of different mobile devices with Internet and its impact on the processes of education. The diagnoses show an overall trend of increasing both: time and content preferences, accessibility, connectivity and access to mobile smart technological devices. In the case of Mexico, concern increases as the frequency of use at an earlier age is checked. Several studies have provided information that can achieve a diagnosis on the fundamental role, almost essential, of digital technologies in the life of young people. Against this background a new challenge for education systems is constructed reducing the generational digital divide has directly affected the teaching-learning process. Thus it is also added risky situations in which children are exposed. Many situations of risk have led to a number of problems for young people and find solution only from different levels of enforcement, including criminal proceedings. Several international studies agree that by finding aimed strategies at safe navigation of minors, there is a responsible use of Information and Communication Technologies (ICT) through the digital literacy of children, parents and teachers. It becomes more evident the urgent need to see and understand the technological progress as an ideal vehicle for the development of reasoning skills, creativity and communication. Also, to (re) consider basic issues of understanding the basis of how and how minors are integrating smart handheld devices and what content, applications and relationships shape such integration. Also, seek to know what implications can have when designing the object and the role of the school in today's society.

There are many evidences that the existing international level on the advantages are generated from technologies and Internet in the classroom. For example, from the point of view from American teachers, teaching at Junior High School is considered that digital technologies have become the center of his teaching and professionalization. At the same time, Internet, mobile phones and social networks have brought new challenges and an overall impact on teaching and direct work in the classroom: a)92% of US Internet teachers have a "significant impact" on their ability to access content, resources and materials for teaching; b)69% of the collective Internet has "significant impact" on the ability to share ideas with other teachers and, c)67% Internet has a "significant impact" on its ability to interact with parents and improve their interaction with students (Purcel, Heaps, Buchanan and Friedrich, 2013). In urban context, it is common that young men and women from Mexican junior high schools live in households with a small number of members. Moreover, the increase of insecurity throughout certain regions in Mexico has made it difficult that young people could spend their free time outdoors. The union of these factors explains why these new generations have grown up with all kinds of smart devices. This Mexican Interactive Generation (MIG), is characterized by a high degree of ownership on

digital technologies, and added to this, a huge degree of interaction between man and technology, and between human beings. It is important to describe some characteristics this generation have:

- 1) Usually the critical review of information does not go beyond the message. Certainly, they have highly developed visual intelligence. Information is organized in a quite different way which is used in a conventional writing manner. Therefore, the books "on paper" they may seem strange to them.
- 2) Continuous interaction on intelligent devices can reach the 24 hours. Its technological competence is based on the primacy of doing before doing well, so adolescents have a hard time to reflect on their own attitudes and behaviors (León, Castile, Forestry and Caudillo, 2013). They also need to receive an immediate reward instead of bonuses.
- 3) They have the most diversified attention. So they are able to perform several tasks simultaneously, such as: listening to music while studying while holding chatting on various social networks.

Nowadays, children know and implement more technology than their their parents. Something that, as we have seen, is crucial in the process of shaping their "identity", values and attitudes (León et al, 2013). Children claim to be "technological experts" at home. They have learned to manage digital devices autonomously, without the mediation of adult education. Therefore, it is clear the disadvantage teachers and parents have among technology. For this reason, the minor may have the authority over mediation and devices.

Thus, this research tests the hypothesis that the use, consumption and production of interactive digital content through mobile devices with Internet connectivity place teenagers in risky conditions. This condition is directly related to several factors: 1)parents' and teachers' use domain among smart devices and; 2) knowledge and sense of risk prevention in order to design and implement strategies on safety use of Internet.

The main aim of this study is to identify associated variables with the use, socialization and risks using portable devices with Internet connectivity on young students from public secondary schools in the city of Hermosillo, Sonora (Mexico). This project has two different objectives requiring different sampling strategies: the first objective is to estimate the prevalence of different variables related to the use and consumption of various mobile devices with Internet access. The second objective is to achieve a representative sample precisely by simple random sampling. The universe is based on secondary school students aged 12 to 15 years old, enrolled in one of the 23 secondary schools in the city of Hermosillo, Sonora, Mexico.

**II. Theoretical foundations.**

As we approached the study of Internet and new technologies in general, we can adopt many views on the phenomenon, different positions that allow an approach to your understanding. In this section the theoretical model which comes from a specific interdisciplinary theoretical perspective is presented. We start to integrate the debate and the need to consider the disciplinary and interdisciplinary from different dimensions that allow refine the real possibilities to analyze and explain a complex and multidimensional social phenomenon. We understand in this sense that a focused approach from one discipline is incomplete. A complex and multidimensional social problems as our object, subject and addressed social problems cannot be worked if it is not taken into account, for example, psychological, sociological and cultural variables. This obviously requires some degree of dialogue between different disciplines.

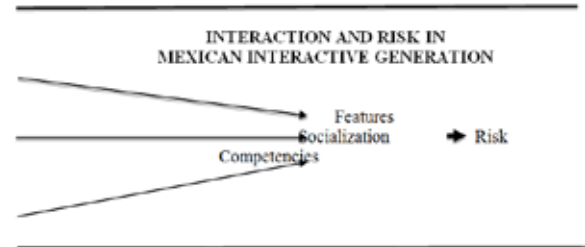
In the context of the role of ICT as a core element of globalization, Repko (1998) and Patry (2013) argue that education should be seen as a process to aid in conflict resolution, communicate, and assess disciplinary contributions while integration of data on prior epistemological frameworks is suggested. From a wide position, interdisciplinarity can be understood as a process and an organizational philosophy applied to scientific academic research. It is, therefore, a way of thinking and to proceed whenfacing the complexity of reality and to solve any complex problems that arise and become evident, both within the structure of each discipline and its scientific practices, treated here as a historical process of knowledge and recognition of its agents and institutions (Leon, 2014: 15).

Urban problems get more and more attention as the world population living in cities expands. Recently there has been a significant increase in research on social issues. Social sciences are beginning to progressivelyengage with anthropology, communication, psychology and other fields. For example, in recent years, technological innovation studies seem to have gained attention not only from science and technology studies, which have been relatively separate and segmented fields from the main disciplines in the social sciences, but also from economics, sociology and anthropology studies, among others (Craig and Tracy, 2014; Craig, 1999). It should be recognized that the interdisciplinary, multi-disciplinary, and transdisciplinary trend has existed from the very moment disciplines emerged. At times, these have been the source of new disciplines, including some that were not crystallized and eventually disappeared. This dynamic of internal cooperation and cross-fertilization between disciplines does not only exist among social sciences. It is also an element of the interactions between the social sciences and other fields of knowledge, especially in natural sciences and humanities (Silbereisen, Ritchie and Overmier, 2009).

On the other hand, Shadish (1993) through the initiative of Critical Multiplism (CM) suggests using multiple theories, hypotheses, methods, researchers, disciplines and synthesis of knowledge in an attempt to explain reality. He expresses that the combination of multiple visions and strategies eliminates the bias that each of them may present, as well as intellectual favoritism caused by own ideas. In any case, the question we raise is whether we can apply the critical multiplism approach in an interdisciplinary research of the interactive generation. This can also lead to consider the explanation of everything from a unique perspective. That risk is reduced if the focus of the research is multiplistic, since science can be regarded as unique, but with multiple ends.

In Figure 1 the treatment of uses, socialization and risks on the Internet and its respective disciplinary (restricted) models is illustrated. This inclusive model, with which we have worked for the 2014 study not only observe the particular relationships studied within each discipline, but also the interactions between objects and specific disciplinary contributions from different fields. In this case, it is possible to contrast between disciplinary models, estimating their particular explanatory power and testing the explanatory power of the interdisciplinary inclusive model. The elaboration and application strategies of the model follow the CM proposal which contemplates the models fixed to the application of interdisciplinary models. We have also added the review and integration theories in this study. As already mentioned, it includes a mixed methodological design and a research hypothesis based on theoretical approaches and disciplinary fields of

study that share at least one or more elements. Additionally it was convenient to count on theoretical approaches that considered integration and contrast as their basic constituents, thus rendering the commensurability of the models.



**Figure 1. Disciplinary models nested in an inclusive interdisciplinary model applied to MIG.**

- 1) Psychology: Usage, Consumption and Features → Risk
- 2) Sociology: Socialization (online) → Risk
- 3) Education: Competencies → Risk

One of the purposes of this investigation is the associated variables that identify the emerging changes in teens’ online habits; due to the strong emergence of portable devices with Internet access. As noted above, this has directly affected consumer habits, young people preferences, as well as the sociocultural implications of these processes. Among the main variables highlighted here are usage time and habits in activities that users use most often, with special emphasis on those activities that allow them to keep in touch (socialization) and share content with peers as well as leisure and entertainment activities. Use and habits variables covered in this research will be presented with special ties to the work of Sonia Livingstone (2002, 2007, 2008, 2010 and 2014) on the framework of the multinational European project on risk and safety of European children. Such studies have focused in the uses and experiences of children on the Internet both on the risks they may face such as *cyberbullying*, pornography, or invasion of privacy, and in areas such as literacy levels and digital competence.

During the process of appropriation of ICTs several defining factors are presented in order to carry out the process. Once there is physical access to communication devices, usually for economic opportunity, has broken the main barrier to entry. Once this is accomplished, the individual is in constant exposure to the use of the device, the need to stay connected forces him to “learn” to use it. This process will be called technologization of the individual. Subsequently use and content preferences are acquired generating a use habit. Thus, the goal of “using” a device relates to the need to use it as a communication tool. When use is constant and frequent, the individual begins to create habits related to patterns and behaviors. For example, Livingstone classified user assimilation forms as well as their level of message comprehension, evaluation capacity, individuals’ positions before the media, the critical range, etc. Her studies warn of different behaviors depending on socio-demographic variables (age, gender, education, social class) and others psychological in nature. The semiotic dimension of the approach is combined with the psycho-sociological traces, so that constructive patterns of symbolic representation appear related to concrete group and human profiles (Livingston, 2008). Other studies are concerned, among other aspects, with the intensive use (Lenhart, Madden and Smith, 2008; Lenhart, Purcell, and Zickuhr Smith, 2010) or the growing influence of certain devices such as cell phones (Purcell, 2011). In turn, there are studies emphasizing the study of use from educational topics and literacy (Eynon and Helsper, 2014), or from the multitasking ability of future generations (Bowman, Waite and Levine, 2014), relationships and the influence of family background (Duerager and Livingstone, 2012), issues related to gender differences (Valkenburg, Peter and Schouten, 2006), the impact of offline differences or content creation (Buckingham, 2013).

Socialization, also known as internalization, is seen here as a process by which the individual adopts the sociocultural elements of her environment and integrates them into her personality in order to adapt to her society. In other words, the socialization process affects various development aspects especially in children and adolescents, including growth, psychological and emotional changes, and social integra-

tion. When we speak of socialization, it is necessary to refer to the socialization process itself which considers not only cognitive learning, but also subjects' consent. Thus the process of primary socialization involves more than a purely cognitive learning. It is conducted under conditions of enormous emotional burden. There are certainly good reasons to believe that without that emotional attachment to other people, the learning process would be difficult, if not impossible. The child identifies herself with the individuals in a variety of emotional ways; but whatever these may be, internalization only occurs when identification is produced. The child accepts the roles and attitudes of others, that is, she internalizes and makes them her own. Through this identification with others, the child becomes capable of identifying herself, of acquiring a subjectively coherent and plausible identity. We can say that, depending on an individual's life stage, acceptance of cultural baggage is conducted differently. During childhood and early adolescence, socialization is usually achieved within culturally homogeneous, affective groups such as family, church, friends. Following the studies of Berger and Luckmann (1968; 1997), primary socialization will be specified as that which occurs mainly during childhood. Then there is what Berger and Luckmann call secondary socialization. Namely, that which takes place mostly during adolescence and early adulthood, even if it lasts throughout an entire lifetime. Secondary socialization consists in the task of undertaking personal life roles in society: those related to the separation of work, professional diversity, social participation, entertainment and religious groups, as well as the sexual role and intersexual relations (Berger and Luckmann, 1968). Similarly, Berger and Luckmann; (1997) state that other people's actions toward children are largely determined by experience patterns and actions derived from a social deposit of the senses. "The child progressively learns to understand and make sense of her counterparts' actions (...) thus, during the process, the child gradually develops her personal identity." (Berger and Luckmann, 1997: 44). Once the young person comes to understand the meaning of her actions, she also understands that she is considered primarily responsible for her own actions. "This is what constitutes the essence of personal identity: the subjective control over an action for which one is strictly liable". (Berger and Luckmann, 1997: 44-45).

If we look at recent research on the potential risks associated with the use that youth and adolescents give to the new technologies we find that the most frequently discussed topics are: inappropriate content, contact with strangers, privacy threats, and to a lesser extent, risks related to e-commerce (Staksrud, Ólafsson and Livingstone, 2013). On the other hand, growth of the information society comes with new risks and threats to individuals that may become a cybercrime. For example, Alvarez (2009) argues that the Internet has a "dark side", full of intruders, viruses, scams, mafias, hacking, espionage, and pedophilia. Meanwhile, Burbules and Callister (2000) explain that one can have disruptive or harmful encounters over the Internet. There can be found harassment, threats, insults, offers of unsolicited things, porn, accounts of violence, etc.; they call it "a microcosmos of all the good and bad in society". Finally, Livingstone's studies (2007) define three main types of risks: a). Contact risks: they arise from interpersonal communication through ICTs. Youth maintain dialogues with friends and colleagues via tools such as Messenger and various social networks, but it also includes communication with anonymous people; b). Privacy risks: these refer concretely to the invasion of privacy of an individual; and, c). Commercial risks: they are those derived from advertising and commercial activity that occurs through the Network.

### III. Methodological design.

This study was planned as a descriptive research and required an integrated mixed approach for its application, allowing data analysis in a cross-temporary manner, in this case between years 2012, 2013 and 2014. It observes two methodological phases and a combination of quantitative and qualitative techniques. The quantitative analysis contemplated the application of 2907 questionnaires applied to students in the three grades of secondary schools selected to represent a universe of 27,379 students. The sample is exclusively comprised of secondary school students from the city of Hermosillo, Sonora. The sample was selected as a representation of this universe and taking into account variables such as gender distribution, age, and type of school. In order to determine the representative sample the following parameters were established: Maximum error accepted: 2%; Sample's estimated percentage: 99%; Desired reliability level: 99%; Size of the universe: 27,379 students; the final sample surveyed: 2,907 applied

cases. The questionnaire was applied to all public schools in the city of Hermosillo, Sonora; Mexico.

The qualitative phase of the research design was carried out with the implementation of the focus group technique. It is organized as follows: from the universe and the samples applied to secondary schools in the quantitative study and from the data provided by the website of the Instituto de Evaluación Educativa del Estado de Sonora, several public high schools in the city of Hermosillo, Sonora; Mexico were selected. The selection was made exclusively based on the favorable and unfavorable conditions (from a technical and human point of view of the involvement and collaboration presented) for the implementation of the focus group. From here, each school determined the date, location, and the campus guidance and support staff that would work with the research group for the application of the focus group. Subsequently, with the support of the same career guidance staff from each school, students in all three grades from both genders were chosen. The final sampling was intentional from the previous subject selection based on certain types of inclusion criteria where Internet access (accessibility) and the frequent use of a mobile device with Internet are highlighter. In each focus group there was staff serving as recorders and for technical support of audiovisual equipment. The moderator was always responsible for the research group. Among the technical resources used are a digital voice recorder, digital camera, and audiovisual camera, and the subjects who participated in the seven focus groups. Let's recall that, from a qualitative approach, the sampling is intentional and it is configured from the previous selection of subject type based on certain criteria. In qualitative methodology it is not appropriate to try to meet the standards of validity and reliability.

Most research in this perspective has worked to develop other criteria to assess the quality of qualitative data. It is mostly related to the opinions of the individuals who carry it out. For example, Guba and Lincoln (1989) have introduced a series of standards for validation of alternatives within the interpretive tradition that are analogous to the conventional concepts of validity and reliability. Thus, we focus on defining how interpretations are based on data and on if they are consistent with the qualitative and quantitative data already available.

### IV. Results of the study.

Based on the analysis of the results gathered from the quantitative and qualitative tools and parting from the preliminary conclusions projected by the subjects (students) in response to use, socialization, regulation and control from parents and teachers, the authors generated the following general conclusions:

#### 4.1. Usage, consumption, and Internet preferences.

The associated variable of Internet use is strongly settled on the daily lives of young people enrolled in public secondary schools: 93% of teens between 12 and 15 years old use the Internet at least once a week. 60% uses the Internet daily between two and five hours. Access to the Internet is present at an increasingly younger age. The most common place for Internet use is home, followed by school. However, Internet use is becoming more diverse as it can be accessed in their bedroom and through their mobile phones or other portable devices. Youth develop a wide range of potentially beneficial activities online; for example, digital skills. In Mexico, it is highly likely that a greater use will contribute to developing digital literacy and safety-related skills. Teens are becoming content creators as well as able to multi-task and carry out multifunctional activities. Moreover, most of them learned to use ICTs on their own; which may be an indicator to develop future programs that involve this ability. As for preferences, there is a noticeable trend in use for leisure and entertainment purposes, in addition, daily time devoted by young people to being online, shows an excessive use of ICTs compared to the time spent on school activities. However, this fact is irrelevant since they believe it does not take time away from any other task, including school tasks. There is a clear inclination towards social networks, videogames, online games, and video and music content. Digital natives enjoy a multi-channel ability: they can pay attention to many things at once. They play on the Web, chat, exchange SMS, talk to those who are with them, and talk on the phone, simultaneously.

#### 4.2. Socialization. Communicative interaction.

Another core variable of the study is socialization in interactive relationships among young secondary school students. According to the results, 56.6% of secondary school students have virtual friends, and 43.4% of young people claimed not to have virtual friends. Compared to the previous study when they were asked whether they had any virtual friends, students expressed themselves very similarly to two years from having made the second data collection. As found in previous studies, it has been confirmed that interaction processes via Internet are not decreasing as will be argued below. In line with previous surveys, 56.6% of teens were found to have virtual friends. Young people are in constant touch with friends, they meet new people with shared interests and hobbies, and they expand their skills and knowledge online. The Internet allows young people to extend and strengthen their social relationships. With respect to this associated variable it can be concluded that, although the socialization process is healthy for identity-building, as noted in other studies on the sharing of particular interests, we must emphasize the great risk involved in interactive socialization for there is a high rate of students who claim to have virtual friends, and who may disregard the fact that, sometimes, we do not know who is on the other side of the screen.

#### 4.3. Risk. Regulation, mediation and control from parents and teachers.

To the extent that Internet use has become increasingly personal, parents and teachers' role has become ever more difficult. This implies a great responsibility from guardians and Internet service providers to facilitate risk prevention for teens. It is also an opportunity to provide tools to avoid or overcome such risks. This also means teens have a greater responsibility to care for their own safety, thus, information on Internet safety must be aimed to build confidence, resilience, and digital skills in teens. Starting from family and school, digital skills training is needed to ensure that all teens achieve at least the minimum knowledge required to prevent them from becoming isolated and unable to face possible risks. This also involves trying to broaden the range of activities that teens carry out on the Internet, since very few of them perform creative activities. This interactive generation that can intuitively tell which keys to press in order to get a device running, is also lacking awareness of the procedures required to yield results. This causes anxiety when faced with tasks that involve focus or laborious processes that are slow to play out.

#### V. Discussion of the results.

An associated variable that we have identified in this study is the "sense of attachment and preference" regarding the use and consumption of smart portable devices with connectivity. The opportunity to socialize, share information, and communicate has been identified as the main attraction for young people online. However, educational or academic purposes are not among its main uses. In our opinion, this is one of the main challenges that those responsible for formal education face in secondary schools in Mexico. Mexico's education plans and programs for public secondary schools focus on developing digital skills. Nevertheless, these do not match the reality regarding young people preferences for Internet use. The use of ICTs for leisure and entertainment in youth is highly notable. It is in this indicator where teens' participation is highlighted. The vast majority consider themselves near experts on software and applications that allow them to create content, edit images, music, videos, and photography. They recognize, identify, and make use of a wide variety of websites to publish, share, comment, and participate actively. The variable associated with "sense of attachment and preference" of social networks is characterized by finding entertaining content to keep them motivated. It is materialized when they watch and listen to videos, music, series, and interact with games (preferably) online.

Another variable associated with socialization that plays an important role in this study is what we call "online peer socialization". It is identified through live conversations and demands a high level of attention and interactivity on communication and socialization, especially when carried out anonymously. Most sites where "online peer socialization" comes to life operate with a restriction filter, especially relating to participant age, but since they are public and hold open access, there is no way to check their status and identification. This type of activity related to such associated variable is one of the riskiest online practices since any individual can interact with minors. Participants' identity becomes a concern in communicative interactions. More im-

portance has been given to technology gear than to the participants and the content itself. This is where the main reason for ensuring teens' safety lies.

Our qualitative data verified and deepened the understanding of how secondary school students' identities are formed through "online peer socialization". For teens, being connected on social networks is essential for the building of their identities. Their testimonies highlighted the presence of group confrontation, when they do not agree with something, they express their thoughts on social networks, sometimes changing the mood of those who do not share or agree with their ideas and are exposed to such publications. In our opinion, this is an obvious use and is essential at this stage in their lives as they use interaction and communication with others in order to manage their status and strengthen certain roles in the community. Indeed, a factor for social exclusion is the "non-possession of an intelligent device" (eg mobile or smart phone), since this leaves them outside the peer community. Internet is the means that allows today's youth to extend its network of social relationships, to meet new friends, and to share with old ones their daily routines and interests. Therefore, it is not hard to understand that social networks, are considered as a space for self-expression, connection, and for the building interactive relationships, have become a critical environment for the creation and establishment of teens' identities.

It was observed most students have virtual friends at the period of 2012-2014. However, ways of sociability and interaction between them are built from their relationships in the web. A significant percentage said Internet eases communication, it is useful and essential. In the same way, they express it helps them to save time. There were found some practices related to adolescents such as upload pictures or write diaries, also, a frequent practice is to incorporate processes of intimacy revealing. There is the existence of divergent manners to negotiate the identity status of the teenager. Males and females generate opportunities to be social compared and to express idealized aspects of whom they want to be and who are they pretending to be. Besides, social networks are used to measure peers' opinions and considerations. Therefore, it is considered it is not hard to understand social networks as web spaces to express, connect, and build relationships that led to the construction of identity. Based on qualitative findings, it is important to emphasize the variable associated with cultural identity. From what it is concluded, young men and women share lifestyles as a same ideology in different areas of society.

Finally, devices' portability and accessibility has increased the acquisition of the last variable which is "adapted behavioral pattern". The immoderate dependence on intelligent devices reach a 24/7 use, and are directly linked with school performance, physical and mental health, among other negative effects discovered. Behavior and the kid's emotional state appear as a reaction to adapt to changeable situations. In order to qualitative data, this variable is linked to an emergence context based on "the constantly boredom in their daily lives", as they no longer have "anything to do" is easy for them to entertain in social networks. Based on the responses from the focus groups, teenagers develop anxiety levels considered by them as "normal", their beliefs are related to a "stimuli" and "advantage" to create "new relationships" in their daily lives or just because they "enjoy it". Something that it is not clear, although it is accepted as a generalized behavior is "the permanent connectivity" taken as a habit and preventing the performance of certain activities, such as face-to-face relationships. Additionally, it takes them to organic and psychological diseases. Moreover, it is important to specify that in some point adolescents prefer to hang out or play a sport. In fact, they considered necessary restrictions made by parents and teachers and they do not feel bothered by those limitations. It is considered that parents have the responsibility on the regulation of time on Internet. Parents are the main suppliers of technology. It seems clear that greater domain on Internet from parents and teachers, mean, greatest is the knowledge and risk prevention to design strategies on Internet safety use.

It is important to note the fact of a 40% increase in solo web surfing. It means that young men and women are less monitored, have more access (time and connectivity) to Internet and more exposed to risks. This is linked to the fact of a rise on cases of defamation, harassment and cyberbullying, between other actions considered as felony in accordance with the federal code of criminal procedure in Mexico. This

study provides findings related to parental mediation and control and contact unknown people through social networks. Privacy is a fundamental factor but in some particular circumstances. It is relevant to maintain their privacy among their parents. Adolescents considered meaningful to have a low profile of their own identity even with their personal information such as name and address and inappropriate images or pictures (nudes, semi-nudes, drinking, etc.). In fact, teenagers considered less relevant when he or she has been part of defamation through text-messages or images in a social network. There is a relevant interest on what minor nude pictures really mean. We have found that the youngest prefer this kind of practices. They mention some cases involving sixth graders (elementary school). Particularly girls are the ones to share their own nude or semi-nude pictures with friends or boyfriend. At some point of this process of socialization and communication, a "third party" shares the images spreading virally in different social networks. All of the institutions visited presented this type of cases. None of them have a plan or strategy to solve or to cope with these situations. Social workers interviewed mention an extreme posture of protection towards their child, denying all kind of involvement. Teachers, principals and social workers inside schools have been coping with these conflicts trying to look for a solution, and in particular cases, these conflicts had been solved with the help of law, where young men and women are treated as underaged felonies.

## VI. Conclusion

A first variable associated we have identified among adolescents is the "sense of attachment and preference" in the use of an intelligent device with connectivity. Teenagers find the web as a possibility to socialize, share information and communicate. Being communicated through social networks is essential for their identity construction. However, the educational use is not among their preferences. We concluded that schools play an important role to offer literacy opportunities to parents and teachers. Incorporating technologies inside the classroom is an urgent necessity. Get advantage of the knowledge young people have. The challenge would be to take all that knowledge from the academic context and take it to an innovative and creative context where kids develop competences that education and society requires.

Another relevant associated variable with socialization is "on-line peer socialization". It is identified by live conversations and it demands a high level of attention when communication is carried out anonymously. A great concern in this type of interaction is the identity with people they interact with. In our study there is a huge importance on technology and equipment rather than kid's preferences and contents, even in schools. There is where the main reason to protect minors' safety remain. Qualitative research allowed us to get deeper on the comprehension of the process of identity construction among interactive relationships. Statements highlighted confrontations between groups of young people when something did not seem to be well expressed through social networks. It is a crucial practice where each of them uses interaction and communication with others in order to manage their status and roles determined by their community.

Finally, devices' portability and accessibility has increased the acquisition of a last associated variable named "adapted behavioral pattern". This means the behavior of an individual as a reaction to adapt different situations from their life as a teenager and it is expressed as excessive use or dependence on a smart device. It has increased the acquisition of new patterns of behavior such as anxiety and dependence that affect directly his or her performance at school and at home. Parents and teachers have the responsibility to regulate the use of Internet through any technological device. Constantly literacy among them helps get to the design and implementation of strategies associated with a safety internet use.

## REFERENCES

- Álvarez, Gonzalo (2009). Como protegernos de los peligros de Internet. Madrid: Consejo Superior de Investigaciones Científicas. | Berger, Peter y Luckman, Thomas (1968). La construcción social de la realidad. Argentina: Amorrortu. | Berger, Peter y Luckman, Thomas (1997). Modernidad, pluralismo y crisis de sentido. Barcelona: Paidós. | Bringué, Xavier; Sádaba, Charo y Rodríguez, Julián (2008). La Generación Interactiva frente a un nuevo escenario de comunicación: Retos sociales y educativos. Navarra: Consejo Audiovisual de Navarra. | Bowman, Laura, Waite, Bradley y Levine, Laura (2014). "A Cross-Cultural Comparison of Media Multitasking in American and Malaysian College Students." International Journal of Cyber Behavior, Psychology and Learning (IJCBL) 4.3 (2014): 1-16. | Buckingham, David (2013). Media education: Literacy, learning and contemporary culture. John Wiley & Sons. | Burbules, N. y Callister, T. (2000). Watch it: The risks and promises of information technologies for education. Boulder, Colorado: Westview Press | Craig, Robert y Tracy, Karen (2014). "Building Grounded Practical Theory in Applied Communication Research: Introduction to the Special Issue." Journal of Applied Communication Research 42.3 (2014): 229-243. | CRAIG, Roger (1999). Communication theory as a field. Communication Theory. Discursive Origins of a Communication Discipline. Convention of the National Communication Association, 9(2), (1999): 119-161. | Díaz Barriga, Ángel (2005). Integración a las TIC en el currículo y la enseñanza para promover la calidad y la innovación. Ciudad de México: UNAM. | Eynon, Rebecca y Helsper, Ellen (2014). "Family dynamics and Internet use in Britain: What role do children play in adults' engagement with the Internet?" Information, Communication & Society, 2014, 18-2: 56-171. | Duerager, Andrea y Livingstone, Sonia (2012). "How can parents support children's internet safety?" London: MonografProject- European Community Safer Internet Plus Programme and Sonia Livingstone. | García, F. (2010). Internet en la Vida de Nuestros Hijos ¿Cómo transformar los riesgos en oportunidades? Pamplona: Foro Generaciones Interactivas. | Garitaonandia, Carmelo. (2006). Oportunidades y riesgos para los niños y jóvenes en Internet. London: Staksrud, 2006. | Guba, E. (1989). Fourth Generation Evaluation. Newbury Park: Sage. | Huertas, Amparo y Figueras, Mónica (2014). Audiencias Juveniles y Cultura Digital. Universidad Autónoma de Barcelona. Barcelona: Instituto de la Comunicación. | Hansson, Bengt (1999). ¿Interdisciplinarity: for what purpose? Policy Sciences, 32: 339-342. Netherlands: Kluwer Academic Publishers. | Lenhart, Amanda y Madden, Mary (2007). Teens, Privacy & Online Social Networks. How teens manage their online identities and personal information in the age of MySpace. Pew: Internet. | Lenhart, Amanda y Madden, Mary y Smith, Aaron (2008). Teens and Social Media: The use of social media gains a greater foothold in teen life as they embrace the conversational nature of interactive online media. Pew Internet & American Life Project. Washington DC. Disponible en la siguiente dirección: <http://www.pewinternet.org.com> Acceso en línea el 23 de mayo de 2014. | Lenhart, a; Purcell, k; Smith, a. Zickuhr, k. (2010). Social media and mobile Internet use among teens and young adults. Disponible en la siguiente dirección: <http://www.pewinternet.org/Reports/2010/Social-Media-and-Young-Adults.aspx> Acceso en línea el 19 de abril de 2014. | Livingstone, Sonia (2014). "¿In their own words: What bothers children online?" European Journal of Communication 29.3 (2014): 271-288. | Livingstone, Sonia. (2010). On the rapid rise of social networking sites: New findings and policy implications. Children & Society, 24(1), 75-83. | Livingstone, Sonia. (2008). Taking risky opportunities in youthful content creation: teenagers' use of social networking sites for intimacy, privacy and self-expression. New media & society, 10(3), 393-411. | Livingstone, Sonia (2007). Do the media harm children? Reflections on new approaches to an old problem. Journal of Children and Media, 1(1), 5-14. | Livingstone, Sonia (2002). Young people and new media: Childhood and the changing media environment. London: Sage. | León Duarte, Gustavo (2014). Comunicación y Sociedad en América Latina. Verlag: PUBLICIA Editorial Académica Científica. | León Duarte, Gustavo; Caudillo Ruiz, Dora; Contreras Cázarez, René y Moreno Carrillo, Diana (2014). Internet Seguro y Jóvenes de Secundaria en México. Hermosillo (México): Secretaría de Educación Pública-Gobierno del Estado de Sonora-Universidad de Sonora. | León Duarte, Gustavo y Abril Valdez, José Alberto. (2013). Interactive Digital Communication and New Analysis Approaches in Cultural Practises: The interdisciplinary perspective on the study of Audiovisual Production. Revista Mediterránea de Comunicación. Vol. 4, Nº 1, 85-98. | León, Gustavo; Castillo, Emilia; Montes, Mariel y Caudillo, Dora (2013). Relaciones interactivas, Internet y jóvenes de secundaria en México. Primera oleada sobre usos, consumos, competencias, y navegación segura de Internet en Sonora (2012). Hermosillo (México): Secretaría de Educación Pública-Gobierno del Estado de Sonora-Universidad de Sonora. | Morin, Edgar (1998). Sobre la Interdisciplinarietà. Boletín n° 2. Paris: Centre International de Recherches et Etudes Transdisciplinaires. | UNESCO (2010). Informe sobre las Ciencias Sociales en el mundo. Las brechas del conocimiento. Paris: UNESCO | Purcell, Heaps, Buchanan y Friedrich (2013). How Teachers Are Using Technology at Home and in Their Classrooms. Washington: Pew Research Center's Internet & American Life Project. | Patry, Jean-Luc (2013). Beyond multiple methods: Critical multiplicity on all levels. International Journal of Multiple Research Approaches 7.1 (2013): 50-65. | Repko, Allen (2008). Interdisciplinary Research. Process and Theory. Sage: California. | Shadish, William (1986a). "The person situation debate: A critical multiplicit perspective." Journal of Personality 54.1 (1986): 52-105. | Shadish, William (1986b). "Planned critical multiplicity: Some elaborations." Behavioral Assessment (1986). | Shadish, William (1993). "Critical multiplicity: A research strategy and its attendant tactics." New directions for program evaluation 1993.60 (1993): 13-57. | Silbereisen, Rainer; Ritchie, Pierre; Overmier, Bruce (2010). "La psicología en el vórtice de la convergencia y la divergencia: el caso del cambio social." Informemundial sobre las ciencias sociales. Spanish: 222. | Staksrud, Elisabeth; Ólafsson, Kjartany, y Livingstone, Sonia (2013). "Does the use of social networking sites increase children's risk of harm?" Computers in human behavior, 29-1 (2013): 40-50. | Szostak, R. (2007). Modernism, Postmodernism and Interdisciplinarity. Journal of Integrative Studies, 7(25), pp. 32-87. | Szostak, R. (2002). How to do interdisciplinarity: Integrating the Debate. Journal of Integrative Studies, 3(20). | Valkenburg, Patti; Peter, Jochen y Schouten, Alexander (2006). "Friend networking sites and their relationship to adolescents' well-being and social self-esteem." CyberPsychology & Behavior, 9-5 (2006): 584-590. |