

Construction of childhood in the digital society, a perspective from the risk society

Construcción de la infancia en la sociedad digital, una perspectiva desde la sociedad de riesgo

从风险社会的视角看数字社会中的童年建构

Формирование детства в цифровом обществе, перспектива общества риска

Juan Carlos Valdés-Godínes

National Technology of Mexico ivaldes@ciidet.edu.mx https://orcid.org/0000-0003-4488-7638

Alicia Núñez-Urbina

National Technology of Mexico anurbina@ciidet.edu.mx https://orcid.org/0000-0001-5407-5583

Francisco Orgaz-Aguera

Technological University of Santiago franorgaz@utesa.edu https://orcid.org/0000-0002-4240-8640

Dates · Fechas

How to Cite this Paper · Cómo citar este trabajo

Received: 2022-11-18 Accepted: 2023-02-23 Published: 2023-05-16 Valdés-Godínes, J. C., Núñez-Urbina, A., & Orgaz-Aguera, (2023). Construction of childhood in the digital society, a perspective from the risk society. Publicaciones, *53*(1), 123–135. https://doi.org/10.30827/publicaciones.v53i1.27989

Abstract

This essay's main objective is to present an approximation to the situation of living in the so-called digital societies and the risk that the exposure and free access of personal data and information entails. It leaves citizens exposed to the so-called cybercrimes, as well as the *infoxication* (among other risks) understood not only as the excess of information, but also the information that intoxicates the sociocultural references necessary for the construction of personality in the inhabitants of digital societies; specifically, children and youth. In this context, it is interesting to explore the approaches that authors such as Beck and Lumahn make about how risky it is to live in this type of society and, based on this, to be able to establish some educational intervention strategies in support of the education of children and young people whom inhabit this type of society.

Keywords: digital society, risk society, childhood, prevention, technological object.

Resumen

Este estudio tiene como objetivo hacer una aproximación a la situación de vivir en las llamadas sociedades digitales, el riesgo que ello conlleva con la exposición y libre acceso de datos e información personales, lo cual deja expuestos a los ciudadanos a los llamados delitos cibernéticos, así como a la denominada infoxicación (entre otros riesgos) entendida no solo como exceso de información, sino también como información que intoxica los referentes socioculturales necesarios para la construcción de la personalidad en los habitantes de las sociedades digitales; de manera específica, niños y jóvenes. En este contexto, es interesante explorar los planteamientos que autores como Beck y Lumahn realizan acerca de lo riesgoso que resulta vivir en este tipo de sociedades y, a partir de ello, poder establecer algunas estrategias de intervención educativa en apoyo a la educación de niños y jóvenes que habitan este tipo de sociedades.

Palabras clave: sociedad digital, sociedad de riesgo, infancia, prevención, objeto tecnológico.

概要

这项研究旨在了解人们生活在所谓的数字社会中的情况,其中包括伴随着个人数据和信息的暴露和自由访问所带来使公民暴露于所谓的网络犯罪的风险,以及所谓的信息化(除其他风险外)。该信息化不仅被理解为信息过多,而且被认为使数字社会居民,特别是儿童和青年,人格建设所必需的社会文化参照物沉迷的信息。在这种情况下,我们探索 Beck 和Lumahn 等作者关于生活在这种社会中的风险有多大的方法,并在此基础上建立一些教育干预策略来支持生活在这种社会中的儿童和年轻人的教育。

关键词:数字社会,风险社会,童年,预防,技术对象.

Аннотация

Целью данного исследования является рассмотрение ситуации жизни в так называемых цифровых обществах, риска, который это влечет за собой в связи с обнажением и свободным доступом к личным данным и информации, что делает граждан подверженными так называемой киберпреступности, а также так называемой инфоксикации (среди прочих рисков), понимаемой не только как избыток информации, но и как информация, которая отравляет социокультурные ориентиры, необходимые для

построения личности жителей цифровых обществ; в частности, детей и молодежи. В этом контексте интересно изучить подходы таких авторов, как Бек и Луман, к рискам, связанным с жизнью в этом типе общества, и, исходя из этого, разработать некоторые стратегии образовательного вмешательства для поддержки образования детей и молодых людей, живущих в этом типе общества.

Ключевые слова: цифровое общество, общество риска, детство, профилактика, технологический объект.

Introduction

From its beginning, mankind has created tools to facilitate its stay in the world, which have generated fundamental modifications in its way of living, as well as the creation of new tools, which in turn modify its way of relating to the universe and to its commons. Language, pottery, writing, hunting weapons, crops, the use of metal, printing, steam engines, cinema, canned food, vehicles, the Internet, the telephone, etc., are they all a minimal list of the technologies that have transformed the life of human beings.

To speak about technological reality is also to refer to the reality of technological objects, since digital technology is present in all environments where humans develop, to the extent that they are almost unconscious about the technological reality of the objects that surround them (Baudrillard, 2007).

The technological transformations that have been witnessed in recent decades have had a significant impact on the current reality of subjects to the extent that they eat, interact, travel, learn, etc., increasingly influenced by digital technologies. They perceive the world from new realities to the point that human relationships are permeated not only by the interaction of two or more people, but also by the digital technological medium and although the bits are the same, everyone experiences them differently (Negroponte, 1995).

It is also known that technology implies the technologization of daily life and consequently the risks it represents, as Beck (2002) points out "(...) the very idea (...) of certainty or security is collapsing. A new type (...) of society (...) and a new type of personal life are being built, which among other characteristics, the following stand out"(p.2) "the high rates of daily violence and crime (...) we are moving from a world of enemies to a world of dangers and risks" (p. 4-5). With the particularity that these risks, cease to be local and in the light of digital societies become global (Beck, 2002); in this context one of the most vulnerable sectors is childhood, even more so if we take into account that it is a population with a high rate of temporary exposure to the use of digital technologies. According to UNICEF (2017) digital technology poses significant risks to the safety, privacy and well-being of children that are enhanced by its presence almost anywhere and at any time. However, there are still large gaps in understanding about the impact of such risks and the ideas that children have about them and also, about the development of effective educational actions that lead to a culture of prevention for which school education plays a fundamental role.

Living in the digital society

Technology is a fundamental part of the development of cultures and humanity. Quintanilla (2016) points out that technology is involved in all aspects of human life and in the oldest problems of societies, that is, in the search for understanding about what reality is and how we know it. The author states that the configuration of reality, both in matters of science and morality, is conditioned by technology, that is, we live in a reality mediated by technological instruments. Therefore, if we want to understand how the world is organized today, it is necessary to know the technology of the time; thus, agricultural societies were characterized by a certain type of technology and a way of living, the same happened with industrial societies and today with the digital ones.

Authors such as Baudrillard (1969), Simondon (2007) and Norman (1988) explain the way in which objects are related to human behavior, the construction of identity, their influence in the mediation of family, cultural and social relationships. They expose the importance of technological objects in the daily life of subjects, to the extent of determining the way of seeing life and shaping their personality. In the dynamics of daily life, mediated by technological objects, there is no technological object-subject duality, what we have is more of a continuum between the two, since the diversity and proliferation of objects multiplies the relational needs.

According to Latour (2008), who proposes technological objects as beings, they would have a cycle of production, birth and death and even, the necessary vocabulary to name them is builded (Baudrillard, 1969). Technological objects are a determining part in the social, economic, ideological, educational transformations, among others that have been experienced throughout the history of mankind and that have defined the development of cultures and societies.

The author Sibilia (2005) defines the human being as flexible and adaptable, as moldable matter, unfinished, versatile, which has been configured historically and geographically in different ways. But she also explains that the development of capitalist societies (mainly) over the last 300 years in the West has created a wide range of techniques that have shaped bodies and subjectivities. In this way, the author puts forward the idea of the post-organic man, who establishes a direct power game between bodies and contemporary technoscience, trying to overcome the body itself with an aseptic, artificial, virtual and immortal ideal. He argues that there are processes of organic-technological hybridization that help to clearly identify the amalgamation of technology and man.

Based on approaches such as this, it is evident that technology not only helps to make life easier, but also transforms it constantly and directly. However, these transformations are not always perceptible and do not necessarily bring about positive changes in the development of societies. Because, by modifying the way we live, interpersonal relationships are also modified, as well as the way we know and face the world. Therefore, it is important to understand the transformations that the so-called information and communication era has generated in today's life:

Unlike industrial or other types of technology, where technological objects were located in certain places (such as industrial corridors) and to have access to them it was necessary to have access permission and mastery of certain specialized knowledge acquired in educational and training centers, access to digital objects is found in everyday life; hence the proposal to analyze the family as the immediate and everyday environment

where subjects learn to use digital tools, which is shaping an ethic of digitality via digital technological mediation (...) (Valdés, 2022, p. 43)

To live in the digital society is not to live in an ethereal place or away from everyday reality, it is rather to coexist with human and non-human beings (technological objects) on a daily basis through everyday activities such as making calls with a cell phone, using a GPS, the ATM, paying with electronic money, using a digital portal to carry out some administrative procedure, etc. These activities together give shape to the so-called cyberspace (Levy, 2007) as a place of daily coexistence, and from there configure the so-called cyberculture (Levy, 2007).

Thus, we can see that the coexistence between human and technological beings in a technologized society is a daily occurrence. It is also important to highlight the transitional aspect of these societies, which gives them a character of social and cultural syncretism where educational practices, cultural and economic activities (mainly) of the last century are mixed with the current ones, such as the existence of typical markets, festivities and religious ceremonies. This generates border environments made up not only of physical micro-frontiers, but also of socio-cultural practices, among which digital practices stand out and seem to cross these zones, since it is common to find subjects carrying digital skills and abilities regardless of the environments; being children and youth populations the main carriers with a predominant activity such as the use of cellular phones (for example).

Sartori (2002) warns that we take for granted that all technological progress is in itself progress, but that progress does not necessarily bring with it only benefits, as this will depend on what is understood by this concept. For decades, the influence that the media have had on the lives of humans has been analyzed; the work of this author focuses especially on the impact of television among viewers, he states that subjects watch television for hours even before learning to read and write, which shows that technological development impacts on the lives of humans from an early age, which is more evident with the influence of the so-called mass media, which generate messages transmitted to a large audience through one or more media (Deuze, 2021). These media have a fundamental role in the acquisition of habits and behaviors of children, since in this infantile stage they know, learn and acquire new experiences and habits that they will carry throughout their lives (Miralles & Dámaso, 2020) which affects the personality acquired by the individual (Esmaeilzadeh et al., 2018). For example, the publicity through new technologies of certain harmful products, such as alcohol and tobacco, influences a child to consume them at an early age (Rivadeneira-Díaz et al., 2021). Therefore, advertising could affect, in a negative way, children and young people, because they are not able to identify the persuasive techniques used by advertising and are exposed to content promoted by mass media (Cornelius et al., 2019) which affects the health and values of children and young people (Miralles & Dámaso, 2020).

It is necessary to recognize that technologies have a determining influence on social subjects and their human development, since in the so-called "information society", the fusion between man and technology is increasingly profound.

The way of understanding technology has also changed. Gil et al. (2003) consider that it is no longer seen only as a tool that promises a better future, but that improvement *per se* is expected of it. Although the technological progress of the 19th century represented the great hope of humanity, the events of the 20th century place us in a state of alert about what will happen to those of us who face the technological development of the 21st century (Gil et al., 2003). The possibility of having leisure time, of under-

standing the limits between public and private, of having confidence in the veracity of the media and news, as well as the possible addictions to digital media, the search for "false recognition", the unlimited access to any type of information, the overexposure to different stimuli and the normalization of violence.

Even the so-called *infoxication*, known as the growth of information that intoxicates citizens (Casas-Mas, 2014). The overload of information available through new technologies can generate confusion or infoxication among citizens, which can affect to a greater extent children and young people, who do not yet have the skills and abilities to identify positive and negative information (Reig & Vilches, 2013). This leads to the generation of digital violence actions, such as child and sexualized cyberbullying, gender cyberviolence or cyberbullying through social networks (Pérez, 2019; Ponze et al., 2020). Therefore, some of the current realities, transformed by digital technology, are not necessarily linked to improvements in quality of life, which shows that all technology, although it generates benefits, also carries risks.

Negroponte (1995) states that information reached people basically through atoms. However, the vertiginous change to the era of bits has been deep and radical. The author asserts that in recent decades, more and more types of information, both auditory and visual, have been digitized. This digitization has provided us with the opportunity to seek the development of the so-called information and knowledge society, that is, "the ability to identify, produce, treat, transform, disseminate and use information with a view to creating and applying the knowledge necessary for human development" (UNESCO, 2005, p.29), which has given rise to the so-called digitality understood as a way of being, thinking and acting in information and knowledge societies that, as Chanona (2017) points out:

We are, beyond a quantum or epistemic leap, in the experience of a new dimension of reality that transforms values, ranges and measures that articulate it, and establish a new environment of consciousness, perspectives, understandings and scopes of our human condition. (p.1)

Digital technology gives us access, almost unlimited, to any type of information, but it can also confront us with a series of risks not contemplated in its creation and that are evidenced by its incorporation into everyday life in the so-called cybercrime, such as sextortion (blackmail or harassment), sexting (sending erotic or sexual information), cyberstalking (continuous persecution against one's will), grooming (deception of minors by an adult), cracking (modification of software to break protection barriers) or cyberbullying (sustained and repeated threats over time). For Negroponte (1995) the benefits of digitization are clear, however, he also warns that the consequences of digitization are important to analyze. New technologies and digitization have also contributed to making information available and accessible to anyone, and it can be used for various negative purposes. Thus, what is known as digital surveillance appears, based on the availability of personal data on the network (Polo, 2020). Also, distorted and alarmist information spreads faster than others, leading to the generation of biased information and data (Benkler, 2014).

The digital reality of the 21st century transcends practically all spheres of human relations, it is present in life even before conception. In the words of Françors Jacob (1971, quoted in Sibilia, 2005, p.69), "today the world is messages, codes, information" according to the author, the border between the natural and the artificial is increasingly thinner and its repercussions in everyday life and the imaginary are broader. The

world is known through digital data that reach individuals through almost all senses. The constant activity of searching and managing information has even led to the generation of words that describe, to a large extent, acting in the digital world. Some of the verbs that have emerged from the use of digital technologies are: googlear (searching for information through Google), facebookear (being on Facebook all day), tuitear (writing a text on the social network Twitter), instagramear (using Instagram by uploading or rating photos or stories) and stremear (live streaming content from any digital platform).

The human being is used to access information, communication, entertainment almost immediately thanks to the use of digital technologies; communication is generated mainly through applications, programs and digital platforms (Facebook, tweeter, WhatsApp, etc.), people are informed thanks to Web search engines, seek entertainment on platforms designed to keep them connected for hours passively or actively (YouTube, Netflix, video game consoles, etc.). In other words, interaction with society and knowledge is largely mediated by digital technology.

Risk societies (State of the art)

For Galindo (2015) the concept of risk is one of the main theoretical tools of contemporary sociology to address the dynamics inherent to modern society, highlighting to Ulrich Beck and Niklas Luhmann in laying the foundations of this concept. Luhmann delimited the phenomenon conceptually and his reflections were substantial for the development of Beck's risk theory.

Thus, the functionally differentiated modern society is the context in which Luhmann carries out his analysis of risk. Luhmann, from his theory of society, proposes the risk/danger form, assuming that there is insecurity in relation to future damage. The possible harm is the consequence of a decision and the risk is the risk of the decision. Or, the possible damage is considered to be caused by the environment, which is then identified as danger (Galindo, 2015).

The Risk society theory proposed by Beck is relevant to understand the dynamics of global society, which involves the daily interaction of human beings. For Beck, the concept of risk society is an outstanding characteristic of modern society. Risk, then, will be an intermediate state between security and destruction, being defined by Beck as the phase of development of modern society, in which social, economic and industrial risks escape the institutions of control and protection of industrial society (Ballesteros, 2014).

In this sense, for Beck it is important for society to become aware of the state of risk, since he considers that this is the only thing that will allow it to create the "utopia" of the construction of another modernity. Therefore, it would be important for society to become aware of risk, since this would give it the possibility of building a "better" life. According to Beck, postmodern society assumes a certain burden of risk inherent to its own identity (Ballesteros, 2014).

Following these ideas, the digital revolution we are experiencing makes it necessary to analyze its impact and the implications that this change represents in the construction of today's society and, therefore, the risks to which users are exposed. UNESCO (2005) states that there is no technological innovation, however simple or elementary it may be, that does not entail risks. And, although some specialists argue that such risks can

be addressed with the information that the digital media themselves provide, it is a reality that the speed with which digital technology evolves and proliferates, makes it difficult to anticipate the risks it deploys. Never before has it been so easy to access other people's information, to contact someone directly from anonymity, to present false or biased information and reach millions of defenseless subjects, such as the child community.

Today, there are many children who have access to smart devices and all the options that the digital world offers; however, we cannot omit that this technology brings with it risks, so it is necessary to analyze what happens in this area to understand the implications it has on education, especially in early childhood education.

Digital technologies enhance the search for information and socialization in children, as well as self-expression and, in times of need, they can be an opportunity to help with a phone call or a message. At the same time, the technologies that help parents keep in touch with their children also make it difficult to monitor their behavior with their personalized devices.

Burns and Gottschalk (2020) frame four main themes that are the focus of attention for children in the 21st century, of which the theme of digital technology stands out and one of the aspects emphasized is cyber risks. Undoubtedly, as children become more connected to the Internet, their exposure to online risks and opportunities increases. That is, risks and opportunities evolve along with technological advances and interactions. Staksrud and his collaborators classify such opportunities and risks into three categories: content, contact, and behavior (Staksrud et al., 2009, as cited in Burns & Gottschalk, 2020). On their side, Ronchi and Robinson (2020) developed a typology of risks that encompasses three broad categories: a) Internet technology risks (including content and contact risks, as well as exposure to illegal or harmful content); b) Consumer-related risks (such as marketing and transaction fraud); c) Risks in the area of information security and privacy.

Finally, regarding the integration of programs aimed at fostering digital literacy in schools, it usually contributes to making children more aware of the risks associated with the use of digital technologies (Chaudron et al., 2018 cited in Burns & Gottschalk, 2020). The above would imply the implementation of policies that provide both children and their parents with the necessary tools and knowledge to protect themselves on the Internet by disseminating information about risky situations or activities in digital environments.

The meaning of childhood in risk societies (Reflections on the topic)

The arguments made regarding the relationship between risk societies and childhood with respect to the use of digital technologies are based on the perspectives and analysis from the adult gaze and as UNICEF (2017) warns, it may happen that the knowledge of the world predisposes the perception of the risks that they try to identify with the idea of childhood understood as a process of identity construction, culturally and historically determined, for which authority figures (especially maternal and paternal) are determinant.

In other words, efforts to recognize children's perception of the present and latent risks in the use of digital technologies is a field that has been little explored. This sit-

uation is aggravated when confronted with the data provided in the report "Children in the digital world" (UNICEF, 2017), where an approach is made on the ideas that children and young people from different parts of the world have about digital technology. The study points out, that what each subject experiences online, varies greatly from one to another. For the risks are not always a function of the behavior itself, in some cases they tend to be a reflection of the socio-cultural context and ideas about how they perceive that behavior. Therefore, it can be assumed that it is not enough to recognize the risks present in digital technologies, but it is necessary to recognize the realities from the perspective of the children themselves, to understand their behavior and to develop effective intervention proposals, based on their perspective, i.e., how children of a given culture live, assume and face such risks. By understanding these vulnerabilities, they can be better protected online and offline, as well as provide better learning and recreational opportunities (UNICEF, 2017).

Berrios and collaborators (2015) state that the younger population is responsible for the significant increase in the use of information technologies, as they are exposed to them from an early age and use them without specific training, which makes them active members of the «e-society». UNESCO (2005) states that not all risks are equivalent, since there are some that are unacceptable, and distinguishes between voluntarily accepted and suffered risks. This strengthens the need to identify, from an ethical reflection, the risks for children arising from the indiscriminate use of digital technologies, knowing the inequality that these sectors represent in identifying them.

Digital technological objects have a high level of affective engagement, being very familiar and empathetic with pleasant activities for children and youth populations, because as Han (2014) points out:

Digital communication makes possible an immediate transport of affect by virtue of its temporality. It transports more affect than analog communication. In this aspect the digital medium is a *medium of affection*. The digital fabric favors symmetrical communication. Today, the participants in communication do not simply consume information passively, but actively generate it themselves. (p. 9).

This affective attachment, in a context of absence or lack of definition of the paternal and/or maternal figures, can generate an atmosphere of replacement and become referents of identity construction among the child population. Closely related to this affective aspect is its playful-pleasurable characteristic as its own essence (Valdés, 2021), which is contained in the digital technological object, that is, there is no need of another person (dad, mom, etc.) to teach the child to play with it; in such a way that child and digital technological object contain each other, forming a playful-pleasurable-self-contained relationship.

Along the same lines are the statements made by Jiménez (2006) who puts forward the idea that the current reality, especially for children, can be defined as a video-living, where that video-child (Sartori 2002), lives and modifies his environment, without even knowing it since he is barely born, technology receives him, and even educates him. Gómez and Lara (2010) point out to technologies such as the Internet, WiFi networks, smartphones, etc. have been diluted and integrated into everyday life, which has made it more complex and enhanced its scope generating a Digital Culture or cyberculture, which can be risky, where the number of users is constantly growing regardless of age, social groups, etc.

According to UNICEF (2017), nowadays the task of stalkers, sex offenders, human traffickers and those with an interest in harming children, is much easier than before, since it is possible to get in contact with their victims practically all over the world, as well as to share abuses and encourage or support each other between them. And as alarming as this risk is, it is not the only one risk that children and young people face when accessing digital technologies thoughtlessly. However, most of the time they are unaware of or ignore these latent risks, moreover, the first authority figures who should be on the lookout are either absent or do not know what to do as first responders and delegate it to "competent authorities", while disqualifying their own competence.

Conclusions

There is an urgent need to develop educational proposals for intervention and prevention of the risks involved in the indiscriminate use of digital technologies among children. In each of the technological revolutions throughout the history of mankind, the need has arisen to establish educational projects to determine "the rules of the game" and avoid the risks posed by technologies. The creation of compulsory schooling in the mid-19th century made it possible to face the challenges of previous industrial revolutions. The new technologies of the 21st century are destined to be a fundamental element in education for all in the post-industrial society, but new educational approaches will be required that include ethical, moral, civic and legal aspects to foster socio-cultural environments of healthy technological coexistence, seeking a harmonious human development including the technological sphere, not only from a utilitarian and efficiency perspective.

The global trend leads to the digitization of services, communication and even emotions, so urban populations are increasingly and more directly immersed in the digital era in many ways.

In addition, the results of the survey about the habits of Internet users show that 92% of Mexican children and adolescents see the Internet as the essential means of communication and spend about three hours a day on some electronic device (Asociación Mexicana de Internet (AIMx), 2008, cited in Islas and Arribas, 2009). Within the school universe it is common to hear children talking about the daily use of digital media, especially to communicate, do school work, play video games, recreate or search for information. They expose their knowledge about platforms and applications, about trends and viral data, about new technological objects. And although their purpose is recreational, the risks of incorporating them as life references are present practically at all times, in face-to-face and virtual spaces where there is little or no intervention of an authority figure who accompanies the child in the anchoring and incorporation of these references.

According to the above idea, it is necessary to create a pedagogical-formative frame of reference in order to understand the dynamics of this global risk society and the role played by the daily use of digital technology among children, as means of communication and information generators and disseminators of ways of being, thinking and living in the context of digital societies.

It is important to point out that this approach should have a preventive sense, as the author mentions "But what does risk mean? Risk is the modern approach to foreseeing and controlling the future consequences of human action, the various undesired con-

sequences of radicalized modernization" (Beck, 2002, p. 5). To understand and comprehend the idea of risk as actions of educational and pedagogical intervention, which allow to build a human sense regarding the use of technology to incorporate it into curricula, at the basic level, with subjects that through their content address issues related to ethics, history, intelligence, digital awareness and civics (among others).

It is essential that parents, tutors and teachers, who are the closest groups to young people, are updated on issues related to the problems they may perceive through the use of new technologies and mass media, because these influence the way they act and think, affecting the behavior and values of children. As parents and tutors, we must guide and establish control measures to protect and prevent young people from the dangers of the Internet. Although the Internet is presented as an indispensable tool, it is important to use it properly, especially during the childhood stage, where digital violence can be generated. Knowing the value of data, privacy and fostering the ability to relate properly through the Internet could help to obtain appropriate behaviors and values in young people.

Funding

The publication of this work has been mainly funded by the project ICT innovation for the analysis of the training and satisfaction of students and graduates of early child-hood and primary education and the assessment of their employers. A transnational perspective (INNOTEDUC), funded by the Andalusia ERDF Operational Programme 2014-2020 (R&D&I Projects). Consejería de Universidad, Investigación e Innovación de la Junta de Andalucía (Spain). Reference B-SEJ-554-UGR20 (2021-2023).

It has also collaborated in the publication the project Evaluation of teacher education in Latin America and the Caribbean. Quality assurance of education degrees (ECALFOR). European Union's Cooperation for Innovation and Exchange of Good Practices Programme (Erasmus+). Reference 618625-EPP-1-2020-1-ES-EPPKA2-CBHE-JP (2021-2024).

References

Baudrillard, J. (2007). El sistema de los objetos. (19a ed.). Siglo XXI.

Ballesteros, B. (2014). Reflexión sobre la teoría de la sociedad del riesgo. Temas Sociales, 35, 203–2015. http://www.scielo.org.bo/scielo.php?script=sci_arttex-t&pid=S0040-29152014000200008&Ing=es&nrm=iso

Beck, U. (2002). La sociedad del riesgo global. Siglo XXI

Benkler, Y. (2014). Cambio: 19 ensayos fundamentales sobre cómo internet está cambiando nuestras vidas. BBVA.

Burns, T., & Gottschalk, F. (2020). Educación e infancia en el siglo XXI: El bienestar emocional en la era digital. OECD y Fundación Santillana. https://doi.org/10.1787/ b7f33425-en

Casas-Mas, B. (2014). Infoxicación a través de los medios de comunicación. Ámbitos: Revista Internacional de Comunicación, 24, 1-11. http://hdl.handle.net/11441/66756

Chanona, O. (2017). Digitalidad: cambios y mutaciones en la cotidianidad. *Revista Digital Universitaria*, 18 (4). https://www.revista.unam.mx/vol.18/num4/art32/

- Cornelius, J., Whitaker-Brown, C., Neely, T., Kennedy, A., & Okoro, F. (2019). Mobile phone, social media usage, and perceptions of delivering a social media safer sex intervention for adolescents: results from two countries. *Adolescent health, medicine and therapeutics*, 10, 29. 10.2147/AHMT.S185041
- Deuze, M. (2021). On the 'grand narrative' of media and mass communication theory and research: a review. *Profesional de la información, 30*(1), e300105. https://doi.org/10.3145/epi.2021.ene.05
- Esmaeilzadeh, S., Ashrafi-Rizi, H., Shahrzadi, L., & Mostafavi, F. (2018). A survey on adolescent health information seeking behavior related to high-risk behaviors in a selected educational district in Isfahan. *PloS one*, *13*(11), e0206647. https://doi.org/10.1371/journal.pone.0206647
- Galindo, J. (2015). El concepto de riesgo en las teorías de Ulrich Beck y Niklas Luhmann. *Acta Sociológica*, *67*, 141–164. https://doi.org/10.1016/j.acso.2015.03.005
- Gil, A., Feliu, J., Rivero, I., & Gil, E. (2003). ¿Nuevas tecnologías de la información y la comunicación o nuevas tecnologías de relación? *Niños, jóvenes y cultura digital*. http://www.uoc.edu/dt/20347/index.html
- Han, B. (2014). En el enjambre. Herder
- Islas, O., & Arribas, A. (2009) *Niños y Jóvenes mexicanos ante Internet*. Razón y Palabra. http://www.razonypalabra.org.mx/N/n67/varia/aarribas.html
- Jiménez, E. (2006) El niño tecnológico: Un perfil educativo. Revista de Investigación. http://www.redalyc.org/articulo.oa?id=376140374007
- Latour, B. (2008). Reensamblar lo social (Una introducción a la teoría del actor- red).

 Manantial
- Negroponte, N. (1995). El mundo digital. (1ª Ed.). Ediciones B, S.A.
- Norman, D. (1988). La psicología de los objetos cotidianos. (6ª ed.). NEREA
- Pérez V. (2019). Ciberacoso sexualizado y ciberviolencia de género en adolescentes. Nuevo marco regulador para un abordaje integral. *Revista de Derecho, Empresa y Sociedad (REDS)*, (14), 42-58.
- Polo, A. (2020). Sociedad de la información, sociedad digital, sociedad de control. *Inguruak. Revista Vasca de Sociología y Ciencia Política*, (68), 50-77.
- Quintanilla, M. (2016). *Tecnología: Un enfoque filosófico y otros ensayos de filosofía de la tecnología*. (1ª Ed. Electrónica).Fondo de Cultura Económica.
- Reig, D., & Vilches, L. (2013). Los jóvenes en la era de la hiperconectividad: tendencias, claves y miradas. Fundación Telefónica.
- Rivadeneira-Díaz, Y., Torres-Valdivieso, R., & Collaguazo-Vega, E. (2021). Sustancias de mayor prevalencia en el consumo que ocasionan comportamientos adictivos en la población infanto–juvenil del cantón Catamayo, provincia de Loja. Periodo 2019-2020. *Polo del Conocimiento: Revista científico-profesional, 6*(4), 246-258. http://dx.doi.org/10.23857/pc.v6i4.2558
- Ronchi, E., & Robinson, L. (2020). La protección de los niños en la esfera digital. En T. Burns & F. Gottschalk (Eds.), *Educación e infancia en el siglo XXI. El bienestar emocional en la era digital* (pp. 203–2020). OECD y Fundación Santillana.
- Sibilia, P. (2005). *El hombre postorgánico: Cuerpo, subjetividad y tecnologías digitales.* (1ª Ed.). Fondo de Cultura Económica.
- UNESCO. (2005). *Informe mundial de la UNESCO: Hacia las sociedades del conocimiento.* http://unesdoc.unesco.org/images/0014/001419/141908s.pdf

- UNICEF. (2017). *Estado mundial de la infancia: Niños en un mundo digital.* https://www.unicef.org/spanish/publications/index 101993.html
- Valdés, J. (2021). (coordinador). *Aprendizaje Significativo a través de Entornos Digitales Inmersivos Tridimensionales (EDIT)*. Universidad Autónoma de Querétaro
- Valdés, J. (2022). De la ética en la sociedad de masas al contexto del enjambre digital (una reflexión en torno al papel de la familia en relación con la tecnología). En J. T. Landaverde, & J. A. Rueda (Coord.), *Éticas educativas para navegar entre lo real-virtual*). CONCyTEQ.