Articles

Relation, information and communication technologies (RICTs) as a tool for social integration

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This research project aims to assess how information and communication technologies (ICTs) are a tool for the social integration of disadvantaged groups. To that end, we studied a group of young people in social exclusion from the Initial Professional Qualification Programs of the Federico Ozanam Foundation in Zaragoza (Spain); we focused on the relationship between their level of digital literacy and their feeling of integration in the main social group. We evaluated their social capacities, their life skills as defined by the World Health Organization, their relational and informative habits and their feeling of empowerment in digital contexts. The goal was to find out if the relationship between these factors and their feeling of integration was directly proportional. The results were positive for most of the indicatives studied.

Keywords: Social integration. Digital literacy. Media literacy. R-elacional factor. Life skills.

Introduction

Nowadays, literacy cannot be understood only as the ability to read and write, which until recently was the one that we needed to live in society, to interact, to coexist and to form an active part of our environment. New digital contexts require the need for a literacy that exceeds the traditional, that is merely based on reading and writing, and that serves as a preparation for life in a digital society[1], in which social and cultural processes are being altered. This is what Echeverría considers, when he speaks of "a techno-scientific revolution that modifies human practices, including daily life."[2] (p. 173).

Digital literacy is necessary in order to provide citizens with the demanded skills in these new environments. These competences enable technical and critical access to information, and the creation of it, as well as and consequently, the necessary participation and ability to interact in social contexts. We are talking about multiliteracies, digital literacy, media literacy, and transformative literacy. The terminology is abundant, but as Casado explains "definitely, being digital literate is to have the essential skills to survive in an information society and to be critical about it"[3] (p. 68).

Since our society is now so greatly influenced by technologies, people in situations of social exclusion need to be trained, developed and empowered to be able to face not only the social mechanisms that leave them out of the commonly established, but also the digital context without which it is no longer possible to live in society, with all that it implies: to dialogue, to study, to find a job, etc.

This emancipation is possible only if the individual feels part of the mainstream group and is in a welfare state in which he is aware of his own possibilities to improve his life and his context, in which he is able to acquire psychosocial skills, the so-called life skills, and to seek actions that lead to social change.

Dialogue is essential for the existence of social relations, social participation, consensus and, lastly, learning. ICTs are witnessing the inclusion of this component in the equation: the relationship. For this, Gabelas et al.[4] coined the concept of RICT –Relation, information and communication technologies (RICTs)– after having studied in depth the so-called "R-elacional Factor" existing in digital communication. This is characterized by the integration of a series of indicators that intervene in the creation, development and maintenance of the R-elational Factor in the learning processes, such as being collaborative, creative, stimulating, focused on the processes, motivating or metacognitive, among others. Marta-Lazo et al. analyse and review the discourse of ICTs and focus not only on technological skills, but on "media multiliteracy, based on different skills dimensions".[5] (p. 40).

The own creators of this concept[6] emphasize that "the Relational Factor maximizes the horizontal and dialogic dynamics, which is amplified in the digital environment, and develops the three dimensions of the individual: cognitive, emotional and social"[6] (p. 188).

In this regard, Marta-Lazo and Gabelas continue to reflect on their last book about the double dimension of the R-elacional Factor: "The R-elacional Factor displays a double dimension. The relational dimension, which contains the potential of psychosocial skills, and the synaptic dimension, which collects the cerebral model as *modus operandi* of learning processes"[7] (p. 84).

This learning based on connections requires dialogue and the intervention of the different social actors that feed the networks. The people who are in contexts of social exclusion need to make more and more frequent use of these communicative and relational skills, as well as psychosocial skills, to integrate and approach the main social group.

When we talk about the ten Life Skills (HpV), as classified by the World Health Organization (WHO)[8], we refer to a set of skills that facilitates the knowledge of a person and that which surrounds them, paying special attention to social relationships and reconciliation, as well as the ability to react against adverse conditions. As we can see, the R-elacional Factor is key in the development of Life Skills, and an essential part in the improvement of the health of the individual, who needs social contact for his own survival[9], even more if they are in an environment of exclusion social.

The goal of this research is to learn the habits of use and consumption of RICTs by the members of a group in a situation of social exclusion and to find out the relationship between these habits and their feeling of integration into the main social group from the city in which they reside.

Method

The sample was made of a total of 40 young people (from a total of 43 participants) of both sexes – 88% males and 12% women – ranging from 16 to 23 years of age and who were enrolled in the Initial Professional Qualification Programs (PCPI) of socio-labour inclusion of the Federico Ozanam Foundation during the 2016-2017 course in Zaragoza (Spain). These programs were created to encourage young people in situations of social exclusion, enrolled in "Garantía Juvenil" and who have not completed the Obligatory Secondary Education; the programs combine training in a trade with the improvement of skills usually taught in standard education.

The "Garantía Juvenil" is an initiative of the European Union which aims to ensure that young people between 16 and 29 years of age, who are not studying, or being trained professionally, or are not employed, can receive an offer of employment, education or formation after having finished their studies or become unemployed[10].

Firstly, we have used a quantitative methodology through the implementation of a structured questionnaire, taking as source the questionnaire developed by Cuevas et al.[11], divided into two categories: access to ICTs and skills in the use of ICTs.

Furthermore, we have taken as reference the analysis developed by Pimienta[12] about the elements that constitute the digital divide before overcoming digital exclusion: infrastructures to access ICTs, capacity and ability for the use of technology, and quality of the use of ICTs.

The first category is related to the access to ICTs associated with the so-called digital divide and must consider key factors such as the infrastructures, the economic access to ICTs and the continuity of these resources.

The second category refers to the competences in the use of ICTs, considered relevant for the digital inclusion, which are related to the technical, the critical use and the relational habit of the RICT, as well as the incorporation of these for a personal or social aim to gain life skills.

Moreover, in order to develop this part of the questionnaire, we have kept in mind the five areas of competence developed by Area and People[13]: the instrumental, the cognitive-intellectual, the socio-communicational, the axiological and the emotional. To assess each skill, we included a series of indicators. The goal was to know the grade of accessibility to ICTs, the use and consumption, and the relationship behavior shown in social networks by the members of this study. This information was deemed essential to constitute two focus groups; one formed by those with greater digital skills and a second one by those who demonstrated a lower level.

Group A was formed by the following five candidates: a) 18 year-old girl, Spanish, gypsy; b) 19 year-old girl, Algerian; c) 17 year-old boy, Spanish; d) 19 year-old boy, Spanish, gypsy; and e) 19 year-old boy, Senegalese. Group B was constituted by the following six candidates: a) 22 year-old girl, Moroccan; b) 17 year-old boy, Spanish, gypsy; c) twenty years-old boy, Moroccan; d) 18 year-old boy, Gambian; e) 18 year-old boy, Nicaraguan; and f) 17 year-old boy, Spanish, gypsy.

Results

The methodological design of this research shows two types of results. On the one hand, those that refer to the use and consumption of RICTs and the digital competence of those investigated, which are measured through the quantitative methodology. On the other hand, those related to the main objective of the research, reflected in the qualitative methodology.

Questionnaire results: quantitative methodology

Access and connection to the RICTs

The first category, concerning the access to RICTs, was related with what Pimienta calls the first digital divide. This category does not directly measure the degree of digital and media competence of the group under study, but it shows an important determinant like the degree of accessibility and connectivity. After analyzing the surveys, it can be found that the access and the connection to the infrastructure of the RICTs are quite optimal for the surveyed group, although there are still some difficulties.

In general, these young people have good access to the infrastructure that makes possible to use ICTs: 83% has Internet connection at home and 65% has access through mobile devices. In addition, 73% says that the Internet connection is good at home and 98% claims that there is good mobile coverage in their neighborhood. This last data is very interesting, since most of the young people surveyed live in the neighborhood of San Pablo in Zaragoza (Spain), a marginal area of the city; the center of the Federico Ozanam Foundation where these Professional Qualification Programs are taught is also found in this neighborhood.

These young people and their families prefer to spend their economic resources to purchase mobile devices and to pay for a service to access the Internet from their mobile phone to another type of devices or RICT services. While 83% manifested that they have purchased a mobile phone at least once, only 38% of the survey respondents

confirmed that they have purchased a computer for their home. In addition, only 50% pays to have Internet at home, while 88% do it to have Internet on their mobile phones.

In relation to the frequency of use of the RICS as a sustained activity in time, we can highlight the notable use of Internet and WhatsApp as opposed to the computer or even making phone calls – 97% claim to use the Internet and 95% WhatsApp.

Skills in the use and consumption of TRIC

The second category of the survey refers to the abilities or skills in the use and consumption of the RICTs, that is to say, the competencies considered relevant for the digital inclusion.

Regarding the instrumental skills, the survey respondents show a high technological knowledge of the tools and applications linked to social networks and mobile phones: 90% of them confirmed that they knew how to search information on the Internet. While 100% are capable of downloading mobile applications, 88% consider that they can send and read emails. Finally, 98% claim that they know how to download images on their mobile phones.

On the contrary, there was a low knowledge of computing activities and software. Only two tasks, "turning on the computer" and "saving a document on a pen drive", have been selected by more than half of the respondents and in relatively low percentages –70 and 55%, respectively– even though they can be considered as simple. The other tasks proposed in the survey do not even reach 50%.

Regarding the social networks that respondents claim to know how to use, WhatsApp falls first with 95%, followed closely by Facebook and Instagram –88 and 85%, respectively–.

As for the level of cognitive-intellectual competence of respondents, related to those skills that allow to search, select, analyse and interpret the large amount of information that can be accessed through the RICTs, we observe a very scarce knowledge of the particularities of each site. To carry out Internet searches, Google is mainly used – by 98% –, following by Wikipedia – 45% of them –.

Regarding the critical capacity to select, analyse and decide whether a piece of information is adequate or not, 73% of respondents considered that they were capable of searching for specific information within the rest of information found in a website, 68% claimed to know how to summarize a text or a video in a sentence and 58% used a different website depending on the information they are looking for. Although it is confirmed that more than half of the respondents are considered capable of carrying out these specific tasks, the results could be better, especially in the case of basic tools for the search of information and their analysis.

Most of the young participants in this study were aware that the Internet and social networks include non-truthful information. However, the percentage of respondents who considered the opposite is noteworthy: 38% said that all Internet information is true and 30% considered the information found in social networks true. From this perspective, it would be necessary to instill in them a critical awareness for them to analyze the information found on the Internet.

Ability to produce, disseminate and share messages in networks

Another competence studied in this research refers to social communication, understood as the ability to produce messages in the different languages found in social networks and how to disseminate them or share them with other subjects, as well as the social behaviors that enable socialization through communication.

Many of these young people use the different languages that exist in the networks, but in a very basic way without delving into the possibilities that each tool provides. Regarding the relational habits, young participants in the study use social networks basically to talk to friends and family. In addition, this use has allowed them to maintain friendship and contact (85%) and make new friends (78%). Many of them do not use channels that could give them great possibilities of communication, such as forums or Skype.

Axiological Competence for social conscience

The fourth competence is the axiological, concerning the responsible use of new technologies and the awareness of how they affect the social, cultural and political areas.

Regarding the awareness of the social visibility of the written messages on the Internet and social networks, 85% were aware that their messages can be seen by anyone. As for the awareness of the need of privacy in social networks and the subsequent possible dangers, 33% claimed to accept only acquaintances and acquaintances of their contacts and 52% accept only acquaintances.

There is a low use of ICTs to develop actions of protest or social conscience. 38% claimed to have blogs or social media to denounce a concrete situation and 23% affirmed to have participated in some kind of protest action. However, only 13% participate in forums or blogs of social denunciation.

Emotional competence in interactions

To complete the analysis of the questionnaire, we will look at the questions related to emotional competence. A good percentage of young people do not demonstrate empathy in existing interactions in digital contexts. Only 63% claimed to be aware that their messages could disturb other people.

In addition, these young people show an adequate control of tension and stress in these contexts. In this sense, 80% of respondents believe that they are capable of controlling the stress of situations that take place within the context of social networks.

Results of the qualitative methodology

Through the qualitative methodology, we respond to the main objective of this research: to find out if there is a directly proportional relationship between the adequate use, consumption and interaction of the RICTs by these young people and their feeling of integration into the main social group.

To carry out the analysis of the focus groups, we compared the answers given to each of the questions or issues raised. These were divided into four parts that coincide with the specific objectives of this research.

Influence of the uses of RICT in relational habits

The first goal was to examine whether the way these young people use RICTs influence their informative and relational habits. They use social networks to communicate with their friends and family. In particular, immigrants use them to keep in touch with friends and family of their country of origin. As for the informational habits, there is no obvious relationship. The young participants in group A showed greater development of digital competencies and life skills to inform themselves, but at the same time they consider them unreliable channels. As for the young people who showed less development of digital skills, they do not have a representative habit of accessing information.

Self-esteem and capacity for use and consumption

The second objective was to find out if the capacity of use and consumption of the RICTs in its triple dimension, that is, technical, critical and relational, could improve the young people's self-esteem and their life skills. Indeed, there is a directly proportional relation between an adequate capacity of use, consumption and interaction of ICTs and the development of seven out of ten life skills: self-awareness, empathy, assertive communication, decision making, creative thinking, critical thinking and stress management.

A very obvious example is the one concerning empathy. In this case, participants were asked what they would do if they saw a photograph or a video that puts someone in a compromised position. The difference in the more spontaneous responses was very obvious. In group A, answers were automatic and very similar: "I would tell that person", "if I know the person, I'd warn them", etc. They even expressed the possibility of mediating between the person concerned and whoever had uploaded the video or photo. Differently, when asked this same question, the members of group B reacted by saying: "I'd laugh", "or [I'd] share it directly".

On the other hand, there is no significant relationship between the capacity of use, consumption and interaction of RICTs and life skills, and the interpersonal relationships and management of emotions and feelings. Some of the participants claim to be proud to have learned to use some RICT tools, but a direct proportional relationship between digital competence and empowerment is not confirmed.

Use of TRIC to group instrumental activities

The third objective was to confirm if the young participants use RICTs to participate in activities linked to the main social group. In general, these young people carry out the following activities: online shopping, sealing their unemployment card, renewing their ID card, etc. The range of activities was broader in those participants who have better digital competence and show greater life skills development. Looking for jobs through digital platforms is also an activity more frequently done by these participants.

Integration vs. group and social exclusion

The last objective was to find out how integrated these young people felt. At this moment, it is necessary to mention the different attitudes of participants from both the group A and B to the questions raised, since it is considered to be very interesting for the investigation. While group A members had a responsible and calm attitude and answered questions without the moderator having to insist about it, a big part of group B participants remained in silent at first; after insisting, one made a comment, but others remained in silent all the time or commented that they did not know what to answer. Even one of them got up because he wanted to leave the room. This attitude means that the questions might be uncomfortable.

In general, all participants feel angry and discomforted by the racist or discriminatory situations they have experienced. However, variables like country of origin and gender are not significant with regards to their feeling of integration.

The young people whose life skills are more developed and have a better digital competence not only say to feel integrated in their city, but also appropriate the discourse of the role of "integrator" and leave behind the role of "discriminated". Moreover, they discuss how they do everything possible to integrate others: immigrants, non-gypsy, etc. This is an obvious sign that they feel integrated: "But I feel very integrated, really", "Look, my mom, her best friend is a non-gypsy. And that's not a problem", "my best friend is black. I really say that I get on with everyone very well", "I have friends of all origins: blacks, Muslims, gypsies... I had a girlfriend from Algeria. Yes, really, I don't discriminate anybody."

In fact, some directly expressed that social networks had helped them feel integrated: "In the end it is a way to contact people who have the same tastes as you or the same concerns and this makes you be one more", "I, for example, when it comes to sports, if I had not gotten into any of the groups that I am now part of on Facebook or if I had not looked for teachers, I would never have started practicing parkour and this is a way to get out of my house, to go on holiday to other cities and to do things."

On the contrary, the young people whose life skills are less developed and show less digital competence had reactions very different to the previous participants to the question "Do you feel integrated?". Some reacted sarcastically and others simply did not want to answer: "no", "Yes, yes, I do, I do" - and started laughing -, "you see, I get on with people who do not care about anything. Just look at them. Well, well, well, it's not going very well. We're not really on the right track" "Well, with my looks..." "Nothing, right now I think nothing at all."

While it is true that only one of the boys expressly said to not feeling integrated, the reactions of the majority of group b were very different from of group A and denoted sarcasm or an attempt to evade an uncomfortable question. This difference was decisive to confirm the existence of a directly proportional relationship between the use and the adequate consumption of RICTs by the young participants, enhanced by the development of life skills, and their feeling of integration in the main social group.

Discussion

When social change and new forms of communication require the revision of the term digital literacy, it is time to become aware and redefine the processes, actions and measures that will revert to a real reliteracy[14] or transliteracy of the network society[15],

giving the citizens the knowledge, the skills and competencies necessaries to use and interpret the new communication channels and their languages, which requires training in digital skills.

For Fedorov[16], for example, media literacy is part of the fundamental universal right to freedom of expression, because it is the way in which today we communicate with our fellow citizens. López and Samek also reflect on the human right to literacy or digital inclusion, "coming from the new technological environment created by the Internet"[17] (p. 25) as part of the right to communication and information. Although this research has reflected the possibility of participants to access to the new technologies, we think it is necessary to go in depth in the cognitive, behavioral and ethical aspects. The verification of freedom of expression does not necessarily imply that citizens are able to exercise it; the true right to communication in all its senses requires up-to-date literacy at all education and social levels.

Necessary competencies to survive in digital environments are not only contemplated as a concept aimed to the development of the persons as future and potential workers, but also as a tool that enhances the autonomy of citizens as people trained for life in society.

In these new digital communicative contexts, it is indispensable to acquire Jenkins calls "new media literacy", which includes both reading and writing, from the print culture, and the new forms of visual, audiovisual and digital communication. Jenkins[18] mentions three essential skills to develop in these new contexts: capacity of access to information, technical capacity and critical capacity.

Based on these three skills and the aforementioned classification made by Área and Pessoa, a questionnaire has been elaborated detailing the indicators of each of the precise competencies for personal and social development in digital environments. The comparison of the results obtained in this research with the study carried out following the proposal of the six dimensions of Ferrés and Piscitelli[19] –languages, technology, interaction processes, processes of production and diffusion, ideology and values, aesthetics– which sought to ascertain the degree of media competence to obtain the Spanish citizenship, is extremely interesting. The results found in 2012 showed serious shortcomings in most of the dimensions that make up the media competence. The only aspect that seems to stand out is technology, while the most negative results are focused on the dimensions of aesthetics, languages and ideology, and values.

Our study shows the same tendency: a high instrumental knowledge of mobile devices, but important deficiencies in basic aspects such as the search for truthful information on the Internet, creativity and innovation in the production of communicative products, or awareness of the possibilities offered by social networks to influence the social, cultural and political fields.

Among the results obtained, the directly proportional relationship between the development of digital competence and life skills stands out. This premise was already pointed out in the doctoral thesis of Gabelas[9], who added the relational aspect to the definition of life skills by WHO. On the one hand, he demonstrated how the acquisition of life skills enables the improvement of the capacity of relation in all its renditions and, at the same time, how it allows the appropriate management and behavior in digital environments. These environments, in turn, allow the

implementation of the interaction, which will enhance a learning of the skills that should guide our relationship with the world around us.

The researcher Rosina Pérez[20] observes in her thesis the low capacity of the young people investigated in their use of the new technologies and relates these uses with leisure rather than with the promotion of skills that perpetuate the freedom of choice in society. In our research, we have focused the level of digital competence of the participants as an individual aspect of their capacities that varies from one individual to another; to analyse if social skills undergo changes in terms of greater or lesser digital development. Once we have proven this directly proportional relationship, it will be emphasized by Pérez›s recommendation, because she believes that it is essential to teach these competencies in order to achieve a more equitable society.

Moreover, our research confirms the existence of a directly proportional relationship between the appropriate use and consumption of RICTs by the young participants and their feeling of belonging to the main social group. An approximation that can explain this finding can be related to the importance of the development of the relational factor and life skills, aspects that not only respond to a cognitive dimension, but relate to the necessary guidelines for people to live, to coexist and to learn[21]; something that is directly related to the feeling of belonging to society, education and empowerment.

As suggested by Osuna-Acedo et al.[22] in a recent research project, from the construction of learning together, you can get to the transfer of knowledge, in the sense that Delors gives to learning to live: "The pedagogic transformation that occurs in collaborative and relational environments has as objective the transfer toward the entrepreneurial development, in a working environment in which it is necessary to reinvent itself continuously" (p. 112).

In this way, Marta-Lazo et al.[23], from the perspective of RICTs, arrive to a model that has a double aim in relation to the transfer of learning: "towards empowerment and social transformation, since that motivates participants to participate in changes in their daily lives, as professionals and, finally, as citizens" (p. 11).

Essentially, in this investigation we have observed the need to provide the persons in social exclusion the digital competences and social skills that will allow them to be part of the current communicative processes because, as Cabrera et al. [24] affirm:

> Information and Communication Technologies (ICT), used with imagination and creativity, can function as poles which allow us to jump boundaries and obstacles between the space of the including and that assigned to the excluded; we can open, we are opening up already, in fact, a world of immense possibilities in order to go from one side to another of the established boundaries. (p. 9)

Finally, as limitations of the investigation, it is necessary to indicate that the results are only valid for the students of the program of Initial Professional Qualification of the Federico Ozanam Foundation of the course 2016-2017. As a case study, the results cannot be extrapolated to society as a whole. Likewise, there is another limitation, as the results are based on beliefs and opinions taken from the investigated subjects thinking about themselves only, these may be far from reality, either by their own ignorance or by the concealment of the true facts and attitudes.

References

1.   Gutiérrez A, Tyner K. Educación para los medios, alfabetización mediática y competencia digital. Comunicar. 2012; 38(29):31-9.

2.   Echeverría J. Apropiación social de las tecnologías de la información y la comunicación. Rev Iberoam Cienc Tecnol Soc. 2008; 4(10):171-82.

3.   Casado R. Claves de la alfabetización digital. Madrid: Fundación Telefónica y Foro de Investigación y Acción Participativa para el desarrollo de la Sociedad del Conocimiento (FIAP); 2006. p. 51-5.

4.   Gabelas-Barroso JA, Marta-Lazo C, Aranda D. Por qué las TRIC y nos las TIC [Internet]. COMeIN Rev Estud Cienc Inf Comun. 2012 [citado 13 Jun 2018]; (9). Disponible en: http://www.uoc.edu/divulgacio/comein/es/numero09/articles/Article-Dani-Aranda.html

5.   Marta-Lazo C, Gabelas-Barroso JA, Hergueta-Covacho E. Phenomenological features of digital communication: interactivity, immersion and ubiquity. Soc Inf. 2013; 44 esp:169-93.

6.   Marta-Lazo C, Hergueta-Covacho E, Gabelas-Barroso JA. Applying inter-methodological concepts for enhancing media literacy competences. J Univers Comput Sci. 2018; 22(1):37-54.

7.   Marta C, Gabelas JA. Comunicación digital. Un modelo basado en el Factor R-elacional. Barcelona: Editorial UOC; 2016.

8. World Health Organization. Life skills education in schools. Geneva: WHO; 1993.

9. Gabelas-Barroso JA. La creación de un cortometraje: un proceso de mediación en la promoción de la salud del adolescente [thesis]. Madrid: Facultad de Ciencias de la Información, Universidad Complutense de Madrid; 2010.

10. Gobierno de Aragón. Garantía Juvenil [Internet]. Zaragoza (España): Instituto Aragonés de la Juventud; 2018 [citado 13 Jun 2018]. Disponible en: http://www.aragon.es/Departamentos OrganismosPublicos/OOAA/ InstitutoAragones Juventud/AreasTematicas/03_Empleo/ci.05_ garantia juvenil_ 2014.detalleDepartamento?channelSelected =2530c752ae6fa 210VgnVCM100000450a15acRCRD

11. Cuevas A, García MA, López P, Vellosillo I. Modelo IDEIAS: indicadores de inclusión digital e informacional orientado a salud. In: Cuevas A, Simeão E, coordinadores. Alfabetización informacional e inclusión digital: hacia un modelo de infoinclusión social. Gijón: Ediciones Trea; 2011. p. 69-88.

12. Pimienta D. Brecha digital, brecha social, brecha paradigmática [Internet]. Santo Domingo: Funredes; 2007 [citado 13 Jun 2018]. Disponible en: http://www.funredes. org/mistica/castellano/ciberoteca/tematica/brecha_paradigmatica.pdf

13. Area M, Pessoa T. De lo sólido a lo líquido: las nuevas alfabetizaciones ante los cambios culturales de la Web 2.0. Comunicar. 2012, 38(29):13-20. doi: 10.3916/C38-2011-02-01.

14. Gutiérrez A. Alfabetización digital: algo más que ratones y teclas. Madrid: Gedisa; 2003.

15. Castells M. Comunicación y poder. Madrid: Alianza Editorial; 2009.

16. Fedorov A. Breve repaso histórico: alfabetización mediática en el mundo. Infoamérica. 2011; 5:7-23.

17. López P, Samek T. Inclusión digital: un nuevo derecho humano. In: Cuevas A, Simeão E, coordinadores. Alfabetización informacional e inclusión digital: hacia un modelo de infoinclusión social. Gijón: Ediciones Trea; 2011. p. 17-29.

18. Jenkins H. Convergence culture. Barcelona: Paidós; 2008.

19. Ferrés J, Piscitelli A. La competencia en educación mediática: propuesta articulada de dimensiones e indicadores. Comunicar. 2012; 38:75-82. doi:10.3916/C38-2011-02-08.

20. Pérez R. La competencia digital en un programa para jóvenes desfavorecidos que han desertado de la secundaria [thesis]. Madrid: Universidad Autónoma de Madrid; 2015.

21. Delors J, coordinador. La educación encierra un tesoro. Paris: Ediciones UNESCO; 1996.

22. Osuna-Acedo S, Marta-Lazo C, Frau-Meigs D. De sMOOC a tMOOC, el aprendizaje hacia la transferencia profesional: el proyecto europeo ECO. Comunicar. 2018; 55(26):105-14. doi: https://doi.org/10.3916/C55-2018-10.

23. Marta-Lazo C, Frau-Meigs D, Osuna-Acedo S. Collaborative lifelong learning and professional transfer. Case study: ECO European Project. J Interact Learn Environ. 2018; 26(4):1-13. doi: https://doi.org/10.1080/10494820.2018.1451346.

24. Cabrera J. Nuevas tecnologías y exclusión social: un estudio sobre las posibilidades de las TIC en la lucha por la inclusión social en España. Madrid: Fundación Telefónica; 2005.