Meta-synthesis of Literacy for the Empowerment of Vulnerable Groups

ABSTRACT
The vulnerability translates in concrete human groups that, although they know what occurs around them in a digital matter, by his own social and cultural condition they are alienated and, in this sense, away of the exercise of the information right. The aim has been to analyze the critical, media and digital literacy for the empowerment of vulnerable groups. The systematic review of the literature (meta-synthesis) covers the period between the years 1996-2016 and launched 202 documents, of which 117 fulfilled the inclusion criteria (105 documentary investigations and 12 qualitative studies). The results indicate that boys, teenagers and adults have been benefited and empowered by this literacy, many of them with low educational levels, in an economical disadvantage situation or have been alienated or excluded socially and culturally. The informal spaces for the media and digital training prevail as well as the reconceptualization reflection of the literacy, the reason why the vulnerable groups move away of his profits, like the influence of the empowerment in the social and personal sphere and the educational and communicational implications for those who have the responsibility of empower. It concludes that the groups are vulnerable if only they stay ignorant and that teach them to read and write empower them for the citizen life.

RESUMEN
La vulnerabilidad se traduce en grupos humanos concretos que, si bien conocen lo que ocurre alrededor de ellos en materia digital, por su propia condición social y cultural están marginados y, en ese sentido, alejados del ejercicio del derecho a la información. El objetivo ha sido analizar la alfabetización crítica, mediática y digital para el empoderamiento de grupos vulnerables. La revisión sistemática de la literatura (meta-síntesis) abarca el período comprendido entre los años 1996-2016 y arrojó 202 documentos, de los cuales 117 cumplieron con los criterios de inclusión (105 investigaciones documentales y 12 estudios cualitativos). Los resultados indican que niños, adolescentes y adultos se han beneficiado y empoderado de esta alfabetización, incluso con niveles bajos de educación, con situación de desventaja económica, con altos niveles de exclusión social o cultural. Son los espacios informales los que prevalecen para esta formación mediática y digital y la reflexión sobre la necesaria alfabetización. Se analiza también en este estudio la influencia del empoderamiento en la esfera social y personal, y las implicaciones educativas y comunicacionales para quienes tienen la responsabilidad de empoderar. Se concluye que los grupos son vulnerables si solamente se mantienen con bajos niveles de formación y que alfabetizarlos otorga el empoderamiento requerido para la vida ciudadana.

KEYWORDS | PALABRAS CLAVE
Critical literacy, media literacy, digital literacy, empowerment, disadvantage groups, training, democracy, citizenship.
Alfabetización crítica, alfabetización mediática, alfabetización digital, empoderamiento, grupos vulnerables, formación, democracia, ciudadanía.
1. Introduction

As individuals, we are not capable of controlling the media, nor are we capable of controlling the technological changes that are associated with communications. But, when a citizen communicates using forms of digital media, they take advantage of their empowerment and participation (Giddens, 2007).

Citizens have the right to investigate information (ONU, 1948). This right establishes that subjects procure the information that is needed for their lives. Today, with the digital explosion, subjects can individually procure information and produce information for others using their own resources (López & Aguaded, 2015).

As shown by Area, Gutiérrez and Vidal (2012, quoted by Gertrudix-Barrio, Galvez, Said-Hung, & Duran-Medina, 2016: 114), “literacy is a concept but also a social practice, which varies according to the cultural and technological contexts of every era.” Therefore, processes of media literacy, critical literacy, and digital literacy provide the literate with the skills that are needed to use the technologies for which they were trained, managing the different formats as well as reading and interpreting media (UNESCO, 2011).

This paper develops three kinds of literacy –Critical, Media and Digital– and a particular binder, the empowerment. Each one is defined in the following paragraphs.

Critical literacy can promote multicultural literacy because it is designed to foster understanding regarding the heterogeneity of the cultures and subcultures that are compound by the world’s global and multicultural fabric (Courts, 1998). It promotes democracy and proposes democratization and participation by favouring the use of media instruments, which enables change in social communication (Semali & Hammett, 1998).

This literacy regarding media teaches students to learn about media, to resist media manipulation, and to use media constructively. The development of these tools helps create good citizens who are competent and motivated to participate in social life (Livingstone, 2004; Semali & Hammett, 1998).

The concept of media literacy turns students and teachers into critical thinkers, empowering them in this manner (Rodesiler, 2010) because it includes the variety of technologies through which students access, analyze, evaluate, produce, and communicate information, as opposed to being passive observers within the media frameworks. All of this is achieved through the use and mastery of technology (Sperry, 2006), with the primary objective of the education being to foster active citizens within a social and political democracy (Phillippi & Avendaño, 2011).

Clearly, mastering media entails a series of risks, particularly for vulnerable groups (Livingstone, 2009a). Adding the various phenomena of communications and information, including transmedia storytelling (Jenkins, 2010), as well as various types of mediations (language, money, myths), generates confusion among vulnerable groups due to the mediations themselves (Livingstone, 2009b).

Media literacy can be defined as “the knowledge, skills and competencies that are required to use and interpret media” (Buckingham, 2003: 36). Thus, media literacy seeks to provide the following four elements: access, analysis, evaluation, and content creation. Each of these elements supports the others in a dynamic manner (Livingstone, 2004). Hobbs (1998) considers that media information is constructed as a product of the social situation, and affects people who live in that world.

To these considerations, Jenkins (2006a) adds the recreational focus of contemporary media technology, which can sometimes be used to support issues of civic importance. Similarly, popular culture can lead to more substantive forms of citizenship through new modes of participation such as using new forms of communication (Jenkins, 2006b).

The last notion begins with Gilster’s (1997) concept of digital literacy, which presents the educational terms that are part of formal education, as well as recognizing the importance of digital technology due to the Internet revolution, which led to the necessary training of students in information technology, applied to both texts and multimedia information, considering cultural, civic, and economic participation (Aabo, 2005). Along with the rise of Web 2.0, the need to express, create, share, and interact with information has become inherently squishy (Chase & Laufenberg, 2011).

Castells (2009) understands these characteristics of communication as multimodal because they concern the form in which the reader not only consumes digital information, but also becomes capable of creating and publishing digital content, given that consumption shifts from prime time to my time, and involves simultaneous communications practices. Empowerment is the relationship of power within a person, generating self-confidence, consciousness, and assertiveness over that power (Oxaal & Baden, 1997).

In the case of empowerment through critical literacy, media literacy or digital literacy, citizens are empowered with the aim of lessening their vulnerability, and by gaining literacy in the symbolism of media, they can exercise...
their power vis-à-vis the media itself, and be able to influence those who have an interest in following them (Castells, 2009). Therefore, this study is justified because, the empowerment of people in all aspects of their lives to reach their personal, social, occupational, and educational goals is a basic right in a digital world that promotes social inclusion (UNESCO, 2011).

This paper aims to address the following research questions:
• What are the reasons for inequity and exclusion in education and access to information and technology?
• What characterizes literacy for the empowerment of minority groups?
• What are the educational and communications implications that favor empowerment for these groups?

2. Material and methods

Metasynthesis is a type of systematic-critical review that is very useful for building, describing, or explaining theories regarding phenomena of interest to different disciplines. It offers evidence through a rigorous process of analyzing, interpreting, and integrating the results of primary qualitative studies (Sandelowski & Barroso, 2003; Walsh & Downe, 2005) across six phases: identifying the phenomenon to be studied (Jensen & Allen, 1996); performing readings of the studies; determining the relationships among the studies; translating the studies into each other (Beck, 2001; Nelson, 2002); synthesizing the translations (Beck, 2001); and expressing the synthesis (Noblit & Hare, 2001).

The literature review was conducted using databases (Scopus, Taylor and Francis, Science, WOS) and specialized journals in the areas of “education research” and “communication” (“Historia y Comunicación Social”, “Estudios del Mensaje Periodístico”, “Comunicar”, “Communication Research”, “Communication and Society”, “Journal of Adolescent and Adult Literacy”). The descriptors used were empowerment (topic) and literacy (title) with each of the following variations: Media, Computer, Technology, Information, Electronic, Library, Network, Internet, Hyper, and Digital.

The criteria for inclusion were as follows: documentary studies, qualitative empirical studies, full texts written in English or Spanish, published between 1996 and 2016, employing the tools of media literacy, critical literacy, and digital literacy through training classes, workshops, or programs aiming to empower people (being understood as the process of acquiring power by individuals in situations of inequality with respect to others, whether collectively or individually, to make decisions regarding their lives, participate, and achieve positive changes) (Aguado & al., 2010); and belonging to vulnerable groups (defined as those individuals who are not only social minorities in quantitative terms, but also have a marginalized status and a lack of power) (Mucchi, Pacilli, & Pagliaro, 2013).

The documents were analyzed independently by two observers. The inter-evaluator agreement for the coding of the documents was calculated using Cohen’s Kappa coefficient (Cohen, 1968). The result was .73. According to Fleiss’s (1981), a Kappa value between .40 and .75 can be interpreted as intermediate to good, and a value above .75 can be considered excellent.

The qualitative analysis was conducted according to the constant comparative method proposed by Glaser and Strauss (1967); hence, it used a first-level analysis (open coding), and a second level analysis (axial coding), without attempting to arrive at selective coding (third-level analysis).
This study employed the following criteria for quality proposed by Lincoln and Guba (1985): dependability (the data have been reviewed by two researchers), credibility (in-depth analysis of the experiences or lives of the participants), transferability (the results can be transferred to similar contexts), and confirmability (researcher bias was minimized).

3. Results

Out of a total of 202 documents listed, only 117 met the inclusion criteria: 105 were documentary research, and 12 qualitative research. The reasons for the exclusion of studies are explained in Figure 1.

3.1. Documentary research

The descriptions in the 105 research documents have the following distribution: media literacy (39), information literacy (27), digital literacy (26), technology literacy (8), computer literacy (5), library literacy (3), network literacy (3), Internet literacy (3), electronic literacy (2) and hyper-literacy (0) meaning that more than one was mentioned both in the title and in the main document:

a) 33.33% of the studies analyze the “reconceptualization of the literacy” in the understanding of their own concepts of the media, critical or digital literacy. Of these, 28.57% inquire about the technological change that came paired with the millennium. Others value literacy like a possibility to improve the approximation of the citizens and the vulnerable groups to democracy, social studies, and the institutional (21.42%). Almost half of all studies (42.85%) are focused on comparing literacy from a critical and controversial viewpoint on what it means to access expanding information, to the necessary politics for this. And, in this sense, the challenges that this type of literacy protects are present precisely in this appeal that ICT generates and of how, as much as in aesthetics as in usefulness, it is able to raise the interest of diverse social groups, turning into a point of support for literacy (7.14%)

b) On the other hand, 60% of the researches highlight the “educational implications and best practices”. Case studies are dominant in educational praxis: their focus on employment (7.69%), educational innovation (26.92%) bilingualism and its parallelism with the acquisition of tools for electronic literacy (3.84%), and the renewal of educational strategies by means of media literacy.

It is interesting to observe how the capacities of obtaining information are not only intellectual but physical and relative to the surroundings (50%). These capacities empower the individuals and allow them a citizen exercise inside a democratic society. The fast change of styles and forms of obtaining information, can be become a passport to a hopeful future, especially for the case of the refugees. There are interesting comparisons between China and the United States relative to the implications of the media literacy in the education, and the impact of this training in their lives or, how in Singapore, media and informative literacy has been considered part of the educational politics.

In the same order of ideas, aesthetics is also valid when attracting students to the literacy, especially because it allows citizens to express their feelings and perceptions to the social field in which they move (11.53%). Likewise, to study how to keep the attention of the students on diverse contents, allows the introduction of technological elements for the simultaneous training of the formal elements of the education, as well as of the new technologies.

c) The “informal contexts of digital literacy” do not remain behind. 6.66% of the studies ensure that digital literacy was a job of the public libraries, context that allows that a greater contingent of citizens approach this type of literacy.

3.2. Qualitative research

The 12 qualitative studies that met the inclusion criteria were published between 2000 and 2016 in specialized journals in the areas of education (8), inclusive education (2), and technology (2). Ages of participants who benefited from digital literacy (4), media literacy (3), technology literacy (2) and critical literacy (4) ranged from 5 to 70 years. This finding demonstrates a very broad range of interventions designed for students from childhood to university, with some being special needs students or adolescents—some were indigenous or juvenile delinquents—
and adults with low educational levels, teachers, and trainers. A small number had learning or developmental problems (with speaking and language), or suffered from attention deficit disorder with hyperactivity and disruptive behavioural disorders. Some of the studies were designed to work exclusively with women at risk of social exclusion.

Many of the subjects were African-American, Latin American, or Asian, and shared space with Native Americans. All of them were socially, culturally, and economically disadvantaged. The training primarily occurred in community libraries, urban and public educational institutions, government and municipal spaces, rural schools, and other sites.

The categories that have emerged from this qualitative analysis are summarised in three big categories (metaphors) (Table 1).

3.2.1. Metaphor 1. Illiterate and powerless

The lowest number of studies concentrates on this metaphor regarding illiteracy and its barriers, though it is based on this that the researchers develop their studies and interventions with vulnerable groups. The barriers are (in)visible because technology has successfully made the computer a cultural symbol, but despite this power, some studies find that users lack technological control, which generates anxiety, resistance, a lack of confidence, and uncertainty regarding the use of technologies (Quarshie, 2004).

Although the use of ITCs is reinforced in school through their application as part of the educational process, in the home, students encounter cultural barriers in terms of their use (Iqbal, Hardaker, Ahmad, & Elbeltagi, 2014). The social perception of ethnic minorities is contrary to their own identities (Kapitzke & al., 2001), and added to this distorted perspective are lowered expectations by teachers. With a lack of cultural continuity between school and home, misunderstandings that ultimately lead to academic failure can rise (Dierdre, 2000).

The problem of inequality regarding technological challenges is viewed in terms of access by students with special educational needs (Kesler, Tinio, & Nolan, 2016) and women in risk of social exclusion (Quarshie, 2004). The lack of access to computers and the Internet in homes and schools is an obstacle to the digital and media literacy (Kapitzke & al., 2001). Not owning a computer places people at a technological disadvantage (Quarshie, 2004; Ryan, 2014).

Students not paying attention to the training that they receive as part of formal education and viewing it as irrelevant, and a lack of updates through a continuous learning process which is necessary for digital literacy, limit possibilities for finding employment (Quarshie, 2004).

3.2.2. Metaphor 2. No longer vulnerable: Literacy for empowerment

The greatest number of studies focus on this metaphor regarding ending illiteracy, addressing the direct relationship between the literate subject and his/her new condition of empowerment in terms of technology and media, as well as his/her ability to appreciate the learning and power that these provide for the individual both in his/her own life, and in the lives of those around them.

a) Society and democracy. When women participate in media literacy courses, the empowerment that they gain reduces discrimination against them (Del-Prete, Calleja, & Gisbert, 2011). The issue is not only about breaking stereotypes, about training and access to technology among vulnerable groups, but also about reducing the generational gap and developing a reflexive act regarding social justice (Nat, 2012), and meeting special educational needs (Kesler & al., 2016).

One of the essential values of digital literacy courses is in their social impact. Vulnerable persons become active citizens through digital media by using them in the following ways (Del-Prete & al., 2011): 1) as an element of communication and a demonstration of being literate; 2) to transform their communicative activity towards the comprehension and production of transmedia narratives as part of critical literacy; and 3) as a tool for freedom by
those who use it daily. Young people's use of media helps them understand freedom of movement, and media also provide access to information about this movement (Sun, Basnyat, Vadrevu, & Hian, 2013) and about civic commitment and community participation (Garcia, Mirra, Morrell, Martinez, & Scorza, 2015; Nat, 2012).

The family plays an important role in the acquisition and control of digital and media literacy in school because parents, not having received this type of training, understand the need for their children to have access to technology as a source of social capital (Quarshie, 2004).

b) The social and affective self. The relationship with photographs allows individuals to sustain ties to their family history and hence to construct and represent a part of their cultural identity and experiences related to technology (Del-Prete & al., 2011). Other experiences with technology among vulnerable adolescents reveal that identities can also be constructed through Rap (Dierdre, 2000) and Hip Hop (Nat, 2012).

The online literacy skills that students develop because of social activity in the classroom generate a positive change in their attitudes towards technology, towards themselves as computer users, and towards school (Kapitzke & al., 2001). These same attitudes are demonstrated by older women (Del-Prete & al., 2011). Thus, when the literate adopts what they have learned as their own, they achieve greater independence (Kesler & al., 2016), and this independence is associated with a higher level of satisfaction and motivation for achievement (Kapitzke & al., 2001).

Training becomes a positive experience that is demonstrated by benefits in terms of self-confidence, self-concept, and self-esteem. It reduces self-doubt and helps individuals manage preconceived notions about their own capabilities (Del-Prete & al., 2011; Garcia & al., 2015; Lee & O'Rourke, 2006).

The literacy process has been proven to deliver increased social interaction (Kapitzke & al., 2001). Training becomes a space for opportunities to share individual and collective memories and to redefine individual roles and communicate reflections on life (Del-Prete & al., 2011).

c) The intellectual self. Media literacy training changes the ways in which people understand media information, promoting critical thinking. Media literacy courses for small children help them ask questions about gender, their own use of technology, and the relevance of video games and advertising (Flores-Koulish, Deal, Losinger, McCarthy, & Rosebrugh, 2011; Lee, & O'Rourke, 2006).

Empowerment translates into high levels of comprehension in media literacy about inferential thinking, multiple literacies, and multimodal expression (Kesler & al., 2016), safe navigation through the media (Nat, 2012), and the development of collaborative activities (Garcia & al., 2015).

Learning removes barriers to technology (Del-Prete & al., 2011), increases the levels of digital and media literacy, strengthens collaborative learning, and hence improves interpersonal relationships (Kapitzke & al., 2001).

Some participants believe that the Internet has been an important part of their learning process (Quarshie, 2004; Iqbal & al., 2014). Once the necessary literacy is achieved, it becomes a practice that is rooted in life experiences with a view towards empowerment and social justice, successfully combining academics and critical literacy through the participation of digital media (Garcia & al., 2015).

Empowerment is synonymous with specialized learning (Garcia & al., 2015), in which media are the excuse for their management and application (Flores-Koulish & al., 2011), or it draws on the multimodal production of messages to use semiotic resources, giving interlocutory strength to the messages (Nat, 2012). This empowerment also transcends informal spaces such as extracurricular clubs that promote skills that are not learned in school such as audio-visual management (Ryan, 2014).

When technical problems arise during online activities, solving them generates an equitable relationship between the teacher and the student (Kesler & al., 2016) because, through difficulties, students see that teachers must resolve problems at the same level that they do (Kapitzke & al., 2001). They also learn to identify potential risks that are derived from the socialization in social networks (Sun & al., 2013).

Media literacy can reduce the fear that surrounds technology (Del-Prete & al., 2011) and strengthen decision-making processes (Lee & O'Rourke, 2006) without compromising the enjoyment that is derived from media.

3.2.3. Metaphor 3. Knowing how to empower: Straight to the target

As an expression of the wisdom of knowing how to empower, the education-communication binomial also appears frequently in the different studies analysed. So, the line between the use of technology for education and for recreation by students raises questions regarding how teaching should relate to both domains. Some studies reveal that for young people, the recreational use of technology is separate from its educational uses, as though the
two domains were mutually exclusive (Quarshie, 2004). Although all young students identify school as the site of their first encounter with computers and some indicate that they continue to interact with them in classrooms, more than a few criticize their school’s development of behaviors and practices in terms of electronics (Iqbal & al., 2014).

Another problem related to digital and media literacy is that learning technologies has not been integrated into pedagogical practice in classes in many schools. The inclusion of technology in the curriculum responds to the concerns that arise surrounding the connection between learning and everyday life (Kesler & al., 2016).

Some studies suggest the need to adapt technological planning to promote the inclusion of vulnerable people, adjusting the software, particularly for small children, special needs students (Kesler & al., 2016), or students from very disadvantaged areas (Kapitzke & al., 2001). Doing this facilitates the consolidation of knowledge and critical literacy (Lee & O’Rourke, 2006).

Educational success can be directly attributed to the provision of digital resources and especially to teacher training (Iqbal & al., 2014).

The role that the teacher plays as a creator, innovator, and leader in technology (Kesler & al., 2016; Lee & O’Rourke, 2006). Teacher training implies articulating, using existing resources, and working efficiently at the levels of the individual and the group. The experience that teachers gain through training helps them incorporate new communications media for the development of their classes (Flores-Koulish & al., 2011). Table 2 synthesizes the qualitative findings:

4. Discussion and conclusions

The systematic literature review on the issue of digital literacy, empowerment, and overcoming digital vulnerability that is presented here, demonstrates through each of the actors in the analysis, that granting power to citizens allows them to assume control over their lives in terms of information and communication by wielding the creative reality of messages. This is significant if it remains in a position of ignorance, since achieving the levels of literacy that are necessary for exercising production and communication expresses empowerment, enabling important transformations in the circumstances of the social groups studied.

The groups analysed that achieved literacy exercise their right to information as individuals who can feel –and are– empowered by their condition of being able to wield digital knowledge. In many of these vulnerable groups, empowerment serves as a platform for social change and to define the conditions of immobility in the face of digital challenges.

Informal contexts are gaining ground in literacy because they represent “the real world” or “an authentic context” (Chase & Laufenberg, 2011) in which young people can develop a command of digital literacies for the creative and responsible use of a broad range of new communications media (Underwood, Parker, & Stone, 2003); understand the educational value of YouTube videos and the benefits of reusing content to build communities of learning and informal learning among peers (Tan, 2013); or work through online platforms as an experience in multicultural education (Kim, 2016), in which young people consume texts from media that are produced in geographically distant places,
and compose their own multimodal texts that are based on that media. In this manner, children use game and social media tools to increase their levels of intrinsic motivation, which become beneficial tools for socio-culturally disadvantaged students who come from homes in which the parents have a low level of training (Reynolds & Chiu, 2013). Multimodal texts offer adolescents opportunities to try out literacy practices because they increase their level of commitment and favor self-management (Brown, 2016). The use of commercial video games combined with other media develops the critical capacity of young students (Checa-Romero, 2016).

This critical thinking regarding the media is what fosters empowerment vis-à-vis messages from the media, which are much stronger than personality traits (Austin, Muldrow, & Austin, 2016).

Digital and media literacy training among vulnerable groups (Gozalvez & Contreras-Pulido, 2014: 130) “is key for empowerment when it is understood that empowering citizens means reinforcing freedom, critical autonomy, and citizen participation in political, social, economic, and intercultural issues based on the proper use of media and communications technology”.

The common determinants of a positive and participatory focus to counteract disempowerment among individuals and groups are the “consciousness process” (Freire, 1970), understood as the development of critical thinking through the exchange of shared ideas, practice, and knowledge within a community (Campbell & Jovchelovitch, 2000). A sense of belonging to a community and the exchange of knowledge and arguments, in the context of a lack of media information, can become a source of personal resistance (Garmezey, 1991).

As argued by Dewey (1997), education is necessary because it allows people to participate in democracy and because strong democracies are not possible without trained, informed, and literate citizens. There are key links among literacy, democracy, empowerment, and social participation in politics and in everyday life. Without the development of adequate literacies, the differences between the “haves” and the “have-nots” cannot be overcome because individuals and groups will remain outside of the new global economy, online society, and cultures.

Funding Agency
The following study is based on the research project “Program of Activities on Digital Vulnerability” (PROVULDIG) (H2015/HUM-3434) which belongs to the R&D Programme in Social Science and Humanities 2015 Announcement of the Community of Madrid (Spain).

References


Excellence in Education, 47, 78-95. https://doi.org/10.1080/10665684.2013.866870