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Digital media and learning. Emergent forms of participation and social transformation
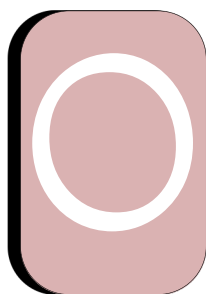
Aprendizaje y medios digitales. Formas emergentes de participación y transformación social

Guest-edited special issue:

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O ver the last 15 years, the field of "Digital media and learning" has become the focus of a great deal of research, entrepreneurship, and educational interventions across the world (Erstad, Gilje, & Arnseth, 2013; Gee, 2009). Sponsored by the MacArthur Foundation in the United States of America, the Digital Media and Learning (DML) initiative was proposed as an area of research and intervention aimed at generating more and better educational opportunities for young people both inside and outside the school context. These learning experiences must be relevant in the lives of learners –based on their interests and areas of affinity– while also preparing them for their optimal academic, work and personal-community development. In this context, the connected learning approach emerges as an attempt to connect the spheres of a young person's life: interests, peer culture, and academic and work opportunities (Ito, Gutiérrez, Livingstone, Penuel, et al., 2013; Kumpulainen & Sefton-Green, 2014; Maul, Penuel, Dadey, Gallagher, & al., 2017).

Educational programs such as "YOUmedia Chicago, Quest to Learn, or Hive learning networks in New York and Chicago" have generated an undeniable interest around how schools and learning contexts must be transformed to adapt to the new digital cultures, and the new competencies required to meet the challenges of the twenty-first century (González-Patiño & Esteban-Guitart, 2014; Jenkins, 2009).

Indeed, today, we humans face hard problems stemming from dangerous interactions among complex systems put into motion by human actions. In the face of these problems, there are many who argue that we can no longer engage in "business as usual", but need new paradigms of teaching, learning, collaboration, and social activism (Gee, 2017; Jenkins, 2009).

Digital and social media have already led to new forms of teaching, learning, and social organization out of school, in the act transforming our ideas of what school can be and how it ought to relate to the world (Esteban-Guitart, Coll, & Penuel, 2018). For example, Video games and related technologies hold out great promise for new and powerful ways to engage in effective problem solving and collective intelligence, especially when they are places inside an eco-system of other technologies and new forms of social interaction (Gee, 2003; Zagalo, 2010). These developments have led a great many people, of all ages, to demand to participate and not just spectate; to produce and make and not just consume; and to develop real expertise outside formal credentialing institutions (Jenkins, Ito, & Boyd, 2016). All this, however, raises deep questions about schools and other social institutions as we currently know them. As we harness the power of digital and social media, should our goal be incremental reform of schools and other social institutions or deep paradigm change?

The promise of digital and social media is greatly endangered by the growing world-wide prevalence of people sorting themselves into echo-chambers of ideologically like-minded others, often disdaining any real critical

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engagement with differing viewpoints, evidence, or collaboration. It seems clear that we must intervene, design, and manage digital media and learning for good and not sit back and assume that our new technologies will work towards good if left to their own devices in our heavily divided and highly unequal world.

The monograph presented is intended to investigate– at the theoretical, practical and empirical levels –the issues indicated in order to advance knowledge of the contemporary forms of participation, both in formal and informal educational settings and in social-public-digital mediated life. The challenge is to find ways of solving global problems in a liquid and high-risk world.

In one way or another, all the articles included in this special issue represent advances in the literature on learning and digital media. We emphasize the international nature of the monograph, as it includes studies carried out in different countries, with samples from the People's Republic of China (Zhang & Cassany), United States of America (Bender & Peppler), Portugal (Pereira, Fillol, & Moura) and Singapore (Chib, Bentley, & Wardoyo).

Next, we present, very briefly, the five articles that are part of this special issue. Firstly, we find an article presented by Gee and Esteban-Guitart entitled "Designing for deep learning in the context of digital and social media". This article exposes the underlying need to overcome cognitive visions of learning and move towards a broad vision that presupposes the connection between learning-doing-being (becoming) in contexts of plural and shared participation around a common interest or passion, linking this personal and collective exercise –both mental and social– to positive results for the individual and the community. In this context, the notion of "designing for deep learning" is proposed. According to the authors, "Designing for deep learning means enticing people to affiliate with something that enhances their lives and those of others, as well as our shared world (…) it means here helping people matter and find meaning in ways that both make them and others healthy in mind and body and improve the state of the world for all living things, with due respect for truth, sensation (pleasure and pain), happiness, imagination, individuality, diversity, and the future." The notion develops from an answer to the classic anthropological question: What is it that characterizes our species? More specifically, derived from current scientific developments, it highlights fifteen characteristics that define the human race and that must be taken into consideration, precisely, so that any design with worthy purposes can contribute and come to fruition.

The text by Zhang and Cassany entitled "The danmu phenomenon and media participation: Intercultural understanding and language learning through "The Ministry of Time" [El Ministerio del Tiempo] stands out for the empirical work of analysis around a phenomenon that is poorly studied and generally unknown in the West, namely, the danmaku or danmu (弹幕) [literally bullet curtain], popular in Japan and China, which mixes interactively, written text –comments that enter into dialogue– with images or frames. In our opinion, it is an illustrative example of a feature that characterizes a large part of the languages derived from digital culture, namely, their multi/pluri-textual (iconic/written) and highly participatory nature, blending user response, through comments, with various contents such as a television series. In particular, the case described in the article refers to the Spanish television series "The Ministry of Time". This is the paradigmatic example, in the Spanish context, of transmedia, social television and discursive expansion through fan communities, which serves as an excuse to see what happens when different users, collectively and without knowing each other, participate in an affinity space. In a word: they learn things; for example they learn Spanish from bilingual subtitles, made by fans themselves, in addition to the free and dynamic comments that overlap and interact with the series. When users talk about the cinematographic genre, the characters, the events of the plot, socio-cultural content or the Spanish language, they are approaching a particular mode of cultural production that facilitates the use of Spanish, as well as learning about certain moments and historical figures of Spain: from the painter Velázquez to the poet Federico García Lorca. However, the "deep" dimension of this learning is unclear. In order for an intercultural exercise to be authentic –going beyond stereotypes or surprise in the presence of that which is dissimilar– we believe that an educational mediation allowing us to complement, justify and clarify difference would be of great interest. To this end, schools, instead of renouncing such forms of literacy and social participation, should incorporate them in their practice and intentionally work from them on issues such as the acquisition of second languages or interculturality.

The third article, "Connected learning ecologies as an emerging opportunity through cosplay", authored by Bender and Peppler, lies within the connected learning framework showing, apropos of cosplay, how formal teaching and learning institutions fail to promote connections between the interests, relationships and curricular areas, future opportunities or professional careers of learners. It is not the case of cosplayers— fans that represent a character or idea through costumes and fashion accessories. We highlight three aspects in this article. First, the authors draw on recent updates to the connected learning model that emphasize three related spheres: relationships (e.g. with peers, family, and mentors), interests (e.g., in fandom), and opportunity (expanding beyond the original report's focus on academics to include careers, political enfranchisement, etc.) In this regard, the principles of "production-centered" around a "shared purpose" are highlighted, as well as the social role of peers or mentors who not only accompany but also promote learning itineraries. Thus, access to resources, services and learning activities is facilitated –both inside and outside the school context–and the interests of learners are connected with available opportunities and resources (sponsorship for pathway building for youth). All of this represents an advance in the initial model of Ito et al. (2013), currently under revision and expansion. Second, the literature on connected learning has been based almost exclusively on the analysis of academic learning pathways of young people; however, this is not true of this study focused on young people and adults between 21 and 33 years old who retrospectively narrate how they developed the skills needed for cosplay. Third, guidelines emerge that should govern the creation of more effective connected learning systems such as, among others: the legitimization of learners' interests, instead of considering them superficial, or the recognition of the opportunities both inside and outside of careers as ways to enhance social and meaningful creative expressions and relationships.

The paper "Young people learning from digital media outside of school: The informal meets the formal", by authors Pereira, Fillol and Moura, in line with the preceding articles, denounces a dissonance between the practices and learning of young people in the school context compared to the practices and learning that emerge from the use of social and digital media in their daily lives. Moreover, the study shows the insufficient role of such media in school. However, the data that seems most laudable in the article is the richness and plurality of learning strategies documented by the authors in the framework of the Transmedia Literacy project: from learning by trial and error, to imitation, through the search for content that shapes the activity. As sustained by one of the authors of this introduction, video games incorporate good learning principles that, unfortunately, are not reproduced in the school context (Gee, 2003). That is, video games, and other digitally mediated practices, such as those described in the articles of this special issue previously cited, are good learning contexts ("I've learned more English with video games than with English classes"). They facilitate social experiences designed to solve interesting and profound problems, and are more than mere instruments that bombard us with information without capacity for it to be retained and

used meaningfully, as happens in a large part of formal school contexts. In a profound sense, we agree with the authors when they state that, "media continue in many schools outside the classroom". And we would add that, in our opinion, what is relevant here is not so much the presence of the artifact (the video game, for example), but the social practice that emerges from it, as well as the context that facilitates meaningful learning experiences. An example would be the "metagame" that takes place in good video games and results in the creation of affinity groups that discuss and learn through the game in question. For this to happen, critical reflection is necessary. According to the authors, "Media uses, practices, experiences and learning enter school with students, but are not explored or discussed inside the classroom".

Finally, the article "Distributed digital contexts and learning: Personal empowerment and social transformation in marginalized populations", authored by Chib, Bentley and Wardoyo, describe a relevant experience that gives meaning to the whole of this special issue by orienting the potential role of social and digital media to the access and participation of groups that are marginalized or at risk of social exclusion – in this case Indonesian migrant domestic workers at the Open University in Singapore. One of the most outstanding features, in our understanding, of digital contexts, practices and cultures, is the potential participation in spaces of participation, learning and cultural creation beyond any socio-cultural credential or characteristic, such as skin color, economic status or religious or national group. A good web environment, for us an "affinity space", allows participation simply by sharing one thing: interest, affinity, passion. It is not necessary to share gender, age, or socio-cultural group. Grouping is based on what is shared, which in this case is positive, rather than what is different: be it age, gender, religion, profession or economic status. Although, unfortunately, on social networks and media we often share with those who "think like me and are like me". This happens, for example, with social networks including Facebook, Instagram or Twitter. Hence, the article's interest in describing how a formal educational context –the University in this case–can facilitate access and participation, under conditions of equality, to people who do not have spaces of expression and cultural creation, due to issues of inequity and power relations. "In the Financial Management course, there are 30 students online and commenting in the forum. We don't know if they're our peers here or if they're from different countries. The important thing is the discussion, comments and answers going on". The text alerts us to a relevant characteristic of what in the first article of the monograph is called "designing for deep learning", namely the need to relate resources, services and learning opportunities in an ecology or distributed network of participation, expression and cultural appropriation. This is what the authors call "distributed contexts of digital learning", which includes the dialogue between formal contexts, such as the University, and informal ones such as a WhatsApp group, YouTube or Facebook. The result of the experience is a transformation at a double level: personal/identitary (personal empowerment) and social (social transformation). As in the other articles, we invite authors to carefully read the citations and empirical data that illustrate, in this case, processes of personal empowerment and social transformation derived from distributed digital practices. Taken as a whole, there are several conclusions that emerge from the five articles included in this special issue, and which we would like to highlight here. There are three core ideas that underlie, in a more or less explicit way, the different contributions.

The first is the demand for non-school socio-cultural practices as generators of deep learning, which, in addition to competencies and content, translates into processes of identity transformation, collective participation and social transformation/improvement. The examples surrounding the danmu ("弹幕") platform, analyzed by Zhang and Cassany, the cosplayers explored by Bender and Peppler, the video games in the study by Pereira, Fillol, and Moura or the open educational resources in the work of Chib and Bentley are paradigmatic in this regard.

The second is the methodological richness with which to address the topic of learning and digital media: from the adaptation and recontextualization of classic strategies of content and discourse analysis (Zhang & Cassany), the use of focus groups (Chib, Bentley, & Wardoyo), the retrospective analysis of learning pathways (Bender & Peppler) or the short-term ethnography from questionnaires, workshops and in-depth interviews (Pereira, Fillol, & Moura).

Last, the authors share the need for new paradigms that reinvent the school and formal educational contexts, within the framework of learning processes that emerge in everyday socio-cultural, digitally mediated practices, outside the school context. With this, the school, one of the major institutions created in the history of humanity, runs the risk of losing its meaning and functionality. We believe that this special issue can contribute to the discussion around this challenge and invite you, in this regard, to carefully read the articles that are included in it.

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