





## EDITORIAL

# Young people, digital mediation, and transformative agency, special issue (part 2)

## Introduction

This international double special issue representing researchers from Australia, Finland, Norway, Portugal, Spain, the Netherlands, the United Kingdom, and the USA revisits and extends prior research on young people's engagement, learning and development with digital technologies and media in their life worlds. Framed by sociocultural theorizing and cultural-historical activity theory (CHAT) the articles in this issue advance scholarly knowledge about the ways in which young people engage with and use digital technologies and media in and across settings, with a specific focus on the transformative potential of these encounters. In doing so, this special issue unpacks conditions and mechanisms that position young people as active, creative, agentic and critical investigators and users of digital technologies for personal and social change across formal and everyday settings, online and off.

The expansion of digital technologies and media, including the Internet, has resulted in major changes in the lives of many young people. New technologies and media have an impact on how young people spend their free time, how they interact and socialize with others, as well as how they make meaning, learn and develop their own identities (e.g. Chaudron, 2015; Erstad & Sefton-Green, 2013; Ito et al., 2013; Li, Hietajarvi, Palonen, Salmela-Aro, & Hakkarainen, 2017). Digital devices and technologically enhanced learning environments are increasingly introduced in formal educational settings to further students' learning in and for the digital age. Digital technologies and media are regarded as having potential in promoting learning by children and young people in a variety of contexts and shaping their learning trajectories. The rapid technological developments have also created new mobilities (Leander, Phillips & Taylor, 2010) and transformation of learning environments and practices (OECD, 2017).

Instead of focusing on the threats and concerns related to young people's uncritical, passive, or consumerist engagement with the digital world and its effect on their values, habits, and identities – rhetoric often emphasized in current research and in discussions held in public media (e.g. Kirschner & De Bruyckere, 2017; Livingstone & Gorzig, 2012) – this issue focuses on the transformative potential of young people's engagement with digital technologies and media within and across settings. Namely, this issue presents empirical studies framed by sociocultural theorizing and CHAT that investigate how young people engage with and use digital technologies and media as agentic actors to coauthor themselves and their worlds (Stetsenko, 2008). In doing so, this issue demonstrates how digital technologies and media can mediate young people's active agency in their life worlds, also bringing youth closer to civic engagement and decision-making processes.

By transformative agency, in this issue we refer to young people's tool-mediated activity that breaks away from the given or expected frame of action. Transformative agency is characterized by young people's initiative and commitment to transform the context(s) of their activity for personal, academic, life in the work force and/or civic ends (e.g. Ito et al., 2013; Rajala, Hilppö, Lipponen, & Kumpulainen, 2013). Transformative agency also holds the potential for expansive learning, including the generation of new concepts, motives, and practices (e.g. Engeström, 2006; Haapasaari, Engeström, & Kerosuo, 2016; Sannino, 2015). To these ends, this issue examines how young people historicize their everyday lives, and how digital tools can support the development of new forms of agency. The focus on transformative agency taken in this issue responds to the criticism raised over novel technology-rich environments such

as makerspaces, for maintaining prevailing educational inequalities and overlooking ethnicity, gender, and social justice (Vossoughi, Hooper, & Escudé, 2016).

The articles presented in this issue share a joint emphasis on cultural and material mediation as being central in young people's transformative agency, learning and development. Originating from Vygotsky's ideas (1978), sociocultural theories and activity theory stress the central role of mediation in learning and development. In this view, artifacts (tools and instruments) mediate actions between subjects and objects. Cognitive instruments such as analytical models and concepts are also regarded as an essential part of joint collective and mediated human activity and as a way to understand the activity, to give it meaning and to develop it. Hence, these instruments must always be examined in relation to the context in which they are used (Cole & Engeström, 1993; Cole, 1996; Lemke, 2000).

Digital mediation is here viewed as being connected to the historical change of activities and social languages (Miettinen, 1999) in the lives of young people. Thus, digital mediation and transformative agency are traced and analyzed in this issue through different sites, temporalities, materializations and spaces. Further, special emphasis is given to the unpredictable and uncontrollable nature of engagement, learning and development in technologically-rich environments (also Kumpulainen, Kajamaa, & Rajala, 2019). The evolution of digitalization in (and out of) the school system in which the young learners participate, is perceived here as being connected to the major technological revolutions toward flexible, collaborative work practices, new forms of digitally ICT-supported production, and learning systems (Bodrožić & Adler, 2018).

The cultural-historical view of human development focuses both on how the environment and its mediational tools (social and material, including digital) situationally act as sources of change and development (Vygotsky, 1994), and through conceptualizing humans and collectives in a continuous process of cultural development. From this standpoint it becomes possible to understand change as a dynamic, tool-mediated entity across societal, institutional and personal situations with opportunities and tensions for learning and development over time (see Hedegaard, 2012). The articles of this special issue underscore the cultural development of humans and practices and for this reason investigate young people's digitally mediated activities and the consequences of these activities for their engagement, learning and development in situ and over time in sociocultural and historical contexts. The issue argues for the importance of investigation into the dynamic processes of young people's engagement, learning and development situated across space and time. Consequently, both formal education and everyday informal spaces are addressed as sites of digital mediation in which young people's transformative agency may emerge and develop.

Taking a temporal perspective that acknowledges the past, present and future activities of young people, this issue extends earlier research on the digitalization of young people's lives and the development of their agency. The special issue views past, present and future as interconnected temporalities, and introduces the notion of "futuremaking" to examine important features of the digitalization of youth practices. Further, the invoking of the human's past is important to re-mediate it into a resource for their current and future action (Gutiérrez, 2008). This issue hence widens our understanding of how young people engage in "social dreaming", to re-imagine new possibilities for themselves and their communities.

Next, we turn to introducing the articles in this special issue. In Part 1, we focus on those articles that investigate young people, digital mediation and transformative agency in the context of formal education. In Part 2, we focus on those articles that investigate young people, digital mediation and transformative agency in their everyday lives that stretch across contexts.

### ***Introduction to the second part of the special issue***

The second part of this double special issue begins with a paper by Kris Gutiérrez, Bryce Becker, Manuel Espinoza, Krista Cortes, Arturo Cortez, José Ramon Lizárraga, Edward Rivero, Karen Villegas and Peng Yin on young people as historical actors (see also Espinoza, 2003) in the

production of possible futures. Drawing on sociocultural and cultural-historical theorizing, and specifically on the notion of transformative agency, their paper explores youth from non-dominant communities leveraging digital tools. The study illuminates how youth (multi-aged groups) developed new conceptual tools to interpret, embody, and leverage a collective socio-historical reconstruction of what it means to be a “migrant student” and an immigrant in the U.S. (see also Gutiérrez, 2008). The study illustrates the subversive practice of “glitching” during video game play, in which youth draw upon the distributed expertise of online communities to re-orient the object of their gaming and the expansive learning activity (Engeström, 2016). The paper by Gutiérrez and colleagues shows how the research participants challenge and resist the rules, boundaries, and norms of their joint activity and take the situation into their own control.

In their article, Ola Erstad and Kenneth Silseth explore Norwegian students’ futuremaking and digital engagement in the intersection between novel artifacts, cultural resources and literacy practices. For Erstad and Silseth, the concept of futuremaking provides a heuristic through which to investigate how young people harness contemporary media and technologies for envisioning their future educational trajectories and possible selves based on their interests developed outside of school. In this sociocultural study, the analytical attention is focused on the personal narratives – or “learning lives” (also Erstad & Sefton-Green, 2013) – of three young people (15 and 18-year-olds) engaged in creative activities mediated by new technology. The article shows how digital technologies and media, and the creative practices of the youth created new opportunities for their agentic actions and futuremaking between formal and informal ways of knowing, being and learning.

In their article, Anna Engel, Jaime Fauré, Antonio Membrive, Iris Merino and César Coll study young people’s digitally-mediated learning trajectories across contexts by considering how these learning trajectories are entangled with their parents’ accounts of what it means to learn through digital technologies and media. The empirical data for this study stem from interviews with Spanish students (10–16-year-olds) and their parents. The authors apply a Subjective Learning Experiences (SLE) method for studying and understanding how young people’s learning experiences across contexts and time are mediated by their own and their parents’ subjective constructions of what it means to learn. The findings of this study point out how parents’ subjective understandings of learning interact with their children’s learning experiences.

The article by Fernando Rezende da Cunha Junior, Claudia van Kruistum, Michalis Kontopodis and Bert van Oers investigates how the emergence of collaborative agency (see also Miettinen, 2013) of Brazilian secondary school students (14–18 years old) participating on Facebook evolves over time. Following Lemos (2017), the article highlights how collaborative agency “is a process that enables participants to collaboratively construct and envision new possibilities toward a joint object”. In this article, the development of the students’ collaborative agency is analyzed through students’ and teachers’ online interactions over time and through results obtained from a student online survey by using Vygotsky’s ideas (1998) on praxis and praxis development and Critical Pedagogy (Freire, 1967; Giroux, 1988; McLaren, 1995). The study shows how the students transformed their online participation from observers to collaborative agents. Moreover, the study makes visible how the students’ agency evolved from individual to collaborative agency in the context of Facebook groups, a developmental process in which teachers played a key role. The development of collaborative agency was found to be essential for the expansion of the activities inside Facebook groups to other contexts.

Tania Dias Fonseca’s paper is motivated to generate new knowledge about the ways in which digital technologies and media afford opportunities for young people’s civic participation. Drawing on a country-wide survey covering grade 11–12 students aged 15–21 years, in Portugal, the study explores the Internet as an informal global playground for young people’s “civic agency”. The study defines civic agency as related to the notion of transformative agency being evidenced when citizens feel that they in concert with others, can in some way make a difference, that they can have some kind of impact on political life, even if they do not win every battle” (Dahlgren, 2012, p. 40). The results make visible how young people perceive themselves as citizens off- and online, as well as their

online civic participation actions. The study shows how young people's informal civic participation online positively correlates with their more formal participation in community groups and school decision-making online and off. Altogether, this study provides evidence the value of informal social networks for youth's civic agency and participation.

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