INTRODUCTION

EDUCATION, CULTURE AND TECHNOLOGY: EDUCATIONAL POLICIES, RESEARCH AND NEW METHODOLOGIES

by Monica Fantin

Among the challenges of research in the fields of education, science and the arts, we can highlight the search for partnerships and the different forms of international cooperation that have provided true experiences of alterity as part of the growing internationalization of our universities. In the search for dialog that seeks to affirm the singularity of each context, going beyond geographic and cultural frontiers, we face increasingly hybrid and interdisciplinary educational initiatives and the creation of new research centers, courses and curricula that reinaugurate discussions and indicate the emergence of new questions.

The proposal and theme of this volume arose in this context, with the objective of reflecting on some of the challenges that contemporary society has presented to consider the relationships between culture and technology from the perspective of education. To do so, we chose to take a look at public policies, experiences with research, and teaching and learning with digital technologies and their new methodologies, ethics and aesthetics.

The diversity of educational and cultural practices and styles that has appeared for confronting the difficulties that each school and university faces to continue to fulfill its role in recent years has indicated different perspectives, tensions and dilemmas in the education of children, youth and adults, from early childhood education to universities. Among these many challenges we highlight the importance of social, digital and cultural inclusion, understood as forms of mediation, which help avoid polarizations and minimize and reduce the gaps between teachers and students, particularly when it comes to using technology. These gaps are generational, between the formal and informal, or may relate to participation, language, knowledge and culture, as Rivoltella affirms (2013, p. 17).

At the same time in which we face these gaps that separate the different contemporary forms of searching for possible responses to the crises in education found in different countries, we recognize the desire to establish networks and bridges. In the epigraph of his book Polegarzinha, Serres (2013, p. 11) inspires us and incites us in the art of this undertaking: "Before teaching anything to someone, it is at least necessary to know this person. These days, who is a candidate for school, from elementary school, to the university?" The responses to these reflections point to the need to not only construct new contents but new methodologies, and to have the courage to face the unknown and the daring to invent, considering that for Serres "the only authentic intellectual act is invention" (54).

Efforts to invent and or reinvent new contents and new ways of teaching and learning in the context of the inclusion of "new technologies" in schools, based

on different public policies, create opportunities for reinterpretations. To signify the new cultural practices resulting from this relationship that we observe in studies and in pedagogical practice, Serres recalls the importance of listening to many sources including the noise coming from outside the school, to the conversations in the halls, to the murmur of students in the back of the class, and to the silence provoked by the exchange of messages sent from under the desks, hidden by books, notebooks and or different screens, at times disobeying the teacher's request. As one 9-year-old Brazilian student said about the use of laptops in school, in the context of a study about the One Laptop per Child Project: "the school remains the same, its just more technological" (in Fantin, 2013).

This sincere observation, which can also be understood as a child's refined perception, reinforces the conclusion of various studies: that the insertion of technologies in the school is not enough to transform pedagogical practices. This leads us to perceive the "communicative ecosystem that constitutes the diffuse and decentered educational surroundings produced by the media" (Martín-Barbero, 2004, p. 59). It is a look that contrasts the modern with the traditional, based on the cultivation of memory and creative intuition, but which also strives to establish dialog and the sustainability of our projects in schools that indicate the need for changes: changes in learning environments, in the reconfiguration of educational spaces, in the emergence of new educational paradigms and in new models for teaching and learning.

Nevertheless, as much as the rapid technological growth changes the forms of interaction, production and dissemination of knowledge in different spaces of society, we know that public education policies and schools do not always accompany these changes. This leads to even more questioning about the role of schools and our role in this formative context that varies according to social, political, economic and cultural conditions.

We organized this edition to discuss some of these questions and to problematize a number of issues such as: the way that public policies for insertion of technologies in schools have dialoged with academic studies; the ways that different socio-cultural contexts have faced the challenge of social, political, cultural and digital inclusion; the importance that scientific and academic debate enrich and qualify the diversity of pedagogical practices and forms of appropriation of technology in schools; the need for new theoretical-methodological approaches to research to capture the intensity, effervescence and diversity of phenomenon that emerge from the culture; the creation of new methodologies to transform and or enrich the teaching-learning processes inside and outside schools; and the importance of new sensibilities and aesthetics in this creative context.

This volume brings together researchers from different countries and universities, who share a bit of their studies. It is organized in three sections.

The first section addresses aspects of the relationship between children and youth with the digital culture, whether mediated by the family or mediated by the school as a result of public policies for digital inclusion.

Upon discussing the aspects of childhood and its unprecedented daily mobilities, the text *Unfolding the Pushchair. Children's Mobilities and Everyday Technologies*, by Susana Cortés-Morales and Pia Christensen, of the University of Leeds, invite us to consider mobility as the effect of multiple human, social and material relations and their technological interdependences. Based on actor-network theory and new social studies of childhood, the text is based on an ethnographic report and suggests that certain technologies found in the daily life of babies can also act as extensions of them and serve for the mediation and cre-

ation of networks of interactions that are part of the social life of children and their families, constructing other forms of agency.

The article *Education and Digital Culture: Constructions of the One-to-one Learning Programme in Buenos Aires City*, Maria Florencia Ripani, Ministry of Education of Buenos Aires City, presents the experience of the Sarimiento Plan in the city of Buenos Aires. Based on a qualitative and quantitative study, the article presents aspects of a pedagogical proposal for the insertion of mobile technologies in the one-to-one model by means of observations, commentaries and statements of children, parents and teachers. It thus gives visibility to changes in practices and attitudes based on motivations from digital integration and inclusion, which can create new spaces for consensus and collaboration and point to new directions for the construction of this type of project.

Based on an inter-institutional study of the One Computer Per Student Project: Administration and pedagogical practices with the laptop in Brazilian schools, in the text *Education-Research in Schools: Places and authorships in question*, Elisa Maria Quartiero, of the State University of Santa Catarina and Monica Fantin, from the Federal University at Santa Catarina, Brazil, examine a case study and emphasize the relationship between the university and the school based on a conception of research-education. It involves a reflection on an experience with the participation of student-instructors, who in a process of learning, use and appropriation of mobile technologies in school, question authority and knowledge and create new dimensions in the relationship between teachers and students.

The article *Growing and learning in multidimensional surroundings. Connecting inside and outside school experiences*, Juana Sancho-Gil and Adriana Ornellas, of the University of Barcelona, presents other meanings of the changes that young people experience through social experiences of learning in contexts mediated by digital technologies and social networks. Experiences, expectations, values, attitudes and forms of learning that are distinguished from modes of learning are problematized in a collaborative study with and about young people.

The second section addresses two experiences with and about e-learning, one in elementary schools and another in higher education.

In the text *Applying a flexible approach in a professionalizing online course: a case study*, Lorella Giannandrea and Laura Fedeli, of the University of Macerata, address a case study of an online professional course for the education of instructors. They highlight the potential of flexible designs and of different spaces and tools used in the course to reflect on learning processes and new attitudes constructed by elearning. This flexibility is also understood as a characteristic necessary for the construction of the professional profile of teachers and instructors.

Meanwhile, the article *Social Network Analysis of a Blended Learning experience in higher education*, by Pablo Maraver López, Ángel Mojarro Aliaño and José Ignacio Aguaded Gómez, of the University of Huelva, reflects on eleaning based on a research experience that combines face-to-face proposals with online/virtual sessions in higher education. The authors call attention to the structure and construction of networks in learning environments based on forums for discussion and analysis of messages shared by teachers and students.

The third section presents methodological and aesthetic questions that permeate different processes of learning and various relations discussed above.

In the text *Episodes of Situated Learning. A New Way to Teaching and Learning*, Pier Cesare Rivoltella, of the Catholic University of Milan, presents aspects of a new methodology that seeks to articulate informal and formal learning by means of a conceptual framework (based on microlearning, theory of simplexity,

neurodidactics) and its structural operationalization based on Italian studies conducted in schools and universities.

Finally, to complete the volume by raising other questions, the article *On the Sense of Aesthetic Experience*, by Roberto Diodato, of the Catholic University of Milan, discusses sensitive and corporal knowledge, its changes, expressions and the variations in sensitivity and in cognition provoked by new technologies and by virtualization processes. Among the specific and current tasks of aesthetics, the author discusses the challenge of the aesthetic experience and of philosophical thinking in the context of art and philosophy.

In this route that involved a careful educational, cultural, philosophical and aesthetic examination, we express our special thanks to the trust of Prof. Pier Cesare Rivoltella and the support of Prof. Andrea Garavaglia, to the editors who agreed to contribute to this issue and to all the colleagues who accepted this invitation. We hope that the good company of these authors and their texts will offer pleasant surprises that are part of an adventure in knowledge and that any bewilderment caused by cultural differences do not inhibit continuing and or constructing new exchanges and bonds.

As an invitation to this "reading excursion" through so many known and unknown places, and the other possible literary, poetic, scientific, philosophical and academic partnerships, I seek inspiration from the *Infinito viaggiare,* by Claudio Magris: *"'Why do you travel through these lands?' the standard bearer asks the Marquês who is at his side in Rilke's famous ballad. 'To return', he responds."*

Santa Catarina Island, December 2014

References

Fantin, M. (2013). *Estudantes e laptop na escola: práticas e diálogos possíveis*. II Seminário UCABASC. Salvador: UFBA.

Martin-Barbero, J., Rey, G. (2003). *Os exercicios do ver*. São Paulo: Editora Senac.

Rivoltella, P.C. (2013). *Fare didattica con gli EAS. Episodi di Apprendimento Situati.* Brescia: La Scuola.

Serres, M. (2013). *Polegarzinha.* Rio de Janeiro: Bertrand Brasil.