Growing and learning in multidimensional surroundings. Connecting inside and outside school experiences

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ABSTRACT

The paper begins discussing the deep and significant change and transformation undergoing young people's social and learning experiences in contexts thoroughly mediated by digital technologies and social media. Today secondary students are very different from how their parents and teachers were. Their experiences, expectations, values, ways of learning and behaviours seem sometimes far away from those of teachers and schools who could have difficulties in connecting with their interest and engaging them in meaningful learning processes. This has led us carry out a collaborative research with and about young people. In this study five groups of students in the last year of the Compulsory Secondary Education (CSE), from five different schools, have developed five ethnographic studies about how they communicate, express and learn inside and outside school, with the support and collaboration of some of their teachers and members of our research group. The results focus on the opportunities or otherwise schools and students promote for connecting inside and learning experiences and knowledge. It also raises a set of challenges for secondary education.

KEYWORDS: Digital technology, Social media, Secondary school students, Collaborative research, School experience.

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1. The expanding educational experiences

Today, to the traditional (real and imaginary) dimensions of our surrounding world and the educational (or *mis-educational*) experiences of children and young people, we should add the virtual ones (Ito, Baumer, Bittanti et al., 2010; Leander, Phillips, & Taylor, 2010; Sharpe, Beetham, & De Freitas, 2010; Potter, 2012; Morrell, Dueñas, García, & López, 2013; Boyd, 2014). Children and young people are living in contexts literally overrun by aural, visual and sensorial stimuli, providing them with very distinctive and varied life and learning experiences (Fisherkeller, 2011; Flanagin, Metzger, Hartsell, Markoc, et al. (2010). These experiences tend to be consistently neglected or rejected by the unchanging structures and orientations of most educational institutions (Sancho, & Alonso, 2012).

Against this background, children and young people who now inhabit the classrooms are very different from the kind of kids their parents and teachers were. Their experiences, expectations, values, ways of learning and behaviours seem sometimes far away from those of teachers and schools who could have difficulties connecting with their interests and engaging them in meaningful learning experiences (Jukes, 2008).

Howe and Strauss (2000) called generations born from the 1980s onwards, and who have been raised in a context where digital technologies are a consubstantial part of daily life, *Millennial*. These are the first generations to grow up immersed in digital media. Most of their activities dealing with peer-to-peer communication and knowledge management are mediated by these digital technologies. *Millennials* are thought to be skilful with computers and multiple digital devices, creative with this kind of technology and, above all, highly skilful at multitasking in a world where ubiquitous connections are taken for granted. These generations are also often referred to as the Instant-Message Generation (Lenhart, Rainie, & Lewis, 2001), *homo zappiens* (Veen, & Vrakking, 2006), the *Net Generation* (Oblinger and Oblinger, 2005), the *Gamer Generation* (Carstens, & Beck, 2005) or the Google generation, by the profound changes search engines are introducing in the way we relate to the information (Gunter, Rowlands, & Nicholas, 2009).

Millenials usually take the surrounding digital sphere and multitasking as a consubstantial part of their daily activity and experience. So, being online while watching TV, speaking on the phone, texting, networking and doing homework, for example, is seen by them as the *natural* way of living. Their recurrent activity with these technologies fundamentally shapes their notions of communication, information management, learning, knowledge and even personal and social values and relationships.

In a more or less explicit way over the last years these young generations have been characterized as smarter, more awoke and even better prepared -at least to deal to digital technologies, than their parents and teachers (Prensky, 2004). A prominent example of this discourse can be found in Boschma, & Groe (2006) work significantly entitled: *Generation Einstein: smarter, quicker and more social. Communicate with 21st century youth.*

However, lately this kind of discourse has started to be challenged. In 2008 Nicholas Carr launched the provocative question if Google was making us stu-

pid[1]. He felt the uncomfortable feeling of somebody playing with his brain. Somebody seemed to be reassigning his neuronal circuits and reprogramming his memory. This reflection led him to ask: What is internet doing with our mind? (Carr, 2010). Other authors have also raised the same kind of questions in relation to digital books and documents (Jabr, 2013), and new studies are emerging, as the one published in Urban Times[2] claiming that in 2011 the attention average of internet users was five minutes. Seven less minutes than in 2001 that was 12. The argument being that the enormous internet potential to capture young people's attention -in decreasing lapses of time- is reconfiguring our mind-frames – particularly that of the younger ones; and even is deeply transforming our civilisation structure. We have more and more access to information, but this information is not always rigorously validated and tends to be more fragmented and decontextualize.

In this vein, more information or more possibility of participating in social networks is not necessarily better and abundance can create the same or even greater problems than scarcity (Ehrenberg, Juckes, White, & Walsh, 2008). Having access to all kind of information and even to the right instruments to produce it does not automatically means capacity to make it meaningful for oneself and for others.

The previous arguments raise a set of questions that as educational researchers we could not possible miss.

- What, how, where and with what and whom contemporary children and youth learn?
- To which extend learning and experiences gained in the virtual spaces outside formal education help or interfere in what it should be learnt to pass formal education exams?
- Are learning, *knowledges*, skills and experiences gained inside and outside educational institutions complementary, supplementary, contradictory, restrictive…. for learning process ?
- Are children and young people learning outside what it should be consider inside?

To be able to explore some of these questions we have implemented the research and development project: (Name of the project). The main aim of the project was to explore if there is a gap or otherwise between what schools believe that learning is (in general, listening to the teacher, making exercises and accounting for a reproductive test or exam) and how young people learn outside school.

2. The research

Our research project takes into account the apparent "alienation, apathy, disaffection, boredom and apprehension" reported by a good number of secondary

1 http://www.theatlantic. com/magazine/archive/2008/07/is-google-making-us-stupid/306868/
2 *feeds.theurbn.com/~r/theurbn/~3/ltLB8Fv3ubo/*

school students (Birbili, 2005: 313); along with the limited impact of digital technologies in schools (Hernández, & Sancho, 2011; Sancho, & Alonso, 2012) that seems to increase the difference between young people's the experiences inside and outside the institution, shaping two cultures with distinct expectations and values (King & O'Brien, 2002). Thus our initial hypothesis was that there is a disconnection between what the secondary school considers learning and how young people learn outside the school in social communities using different literacies. To explore this hypothesis and provide alternatives, we considered studying how young people learn inside and outside school. And we decided to do this *with* them, not *on* them (Holt & Walker, 2009; Hernández, 2011; Nind, 2014).

The epistemological and methodological positioning of this research, that involved secondary schools and students aged fifteen and sixteen for several months of continuous and demanding work, led us to select an intentional sample (Patton, 2002) both of schools and students. Our collaborators represented different existing socioeconomic groups in Catalonia (table 1). We also put an especial emphasis in making sure that the participating groups were as heterogeneous as the school population. So they were made up of different types of students: those that largely met teachers' and schools' expectations, those that generally respond to them and those that do not meet the academic expectations (at least two in each group).

Institution	Researchers /teachers	Students
University of Barcelona	7	5
Virolai School (Barcelona)	1	6
Institute Els Alfacs (Sant Carles de la Ràpita)	1	11
Institute La Mallola (Esplugues de Llobregat)	1	6
Institute El Palau (Sant Andreu de la Barca)	2	6
Institute Ribera Baixa (Prat de Llobregat)	2	5
TOTAL	14	39

Table 1: Participants

We planned to develop this research with the students and the schools within the official curriculum for fourth-year Compulsory Secondary Education (CSE) framework in Catalonia, which included the production of a group research project. The project, to which students should devote one hour per week, was understood as "a series of activities of discovery by the pupils regarding a subject chosen and marked out, partly by themselves, with the guidance of the teaching staff" (Departament d'Educació, 2010, p. 251). This decision would contribute to giving meaning to the process and to the results of the studies. However, the sudden change in the curriculum guidelines converted this project into an optional activity that, up to schools choice, could be implemented in two single weeks at the end of the scholastic year.

The act of working with and about young people and doing it in an institutional context turned the negotiation with them, their families and the schools into an essential part of the research in order to satisfy the ethical requisites.

The most important part of the negotiation way the way of organising the research time with students. Finally three groups developed the whole process within the school timetable along several months. One carried the research out as an extra-curriculum activity organised by the participating teacher. And one decided to meet once per week after school. All groups work together between four and six months. The result of the research conducted by the students with our advice was publically presented and qualified in each school, and in a collective event at the University of Barcelona. More than one hundred people (families, teachers and academics) attended this event.

In relation to the methods of collecting information, each school team (made up of secondary school students, school teachers and university teachers) decided on and learnt the techniques that would enable them to progress in the ethnographic study. In brief, these consisted of: observations and self-observations, field logbooks, audiovisual documentation (photography, video, music, etc.), interviews and group discussion. On the other hand, the whole process and the collected data were shared among participants of each group through variety of digital resources: virtual learning environment; e-mail; services of social networks; shared and collaborative online; documents; intranet or web and internet service.

As stated arlier, our research was not intended to be *about* young students, but *with* young students (Hernández, 2011). This process is being done from a reflexive perspective (Macbeth, 2001). Here, we assumed a *bricoleur* position (Kincheloe, & Berry, 2004) that implies that relationships are built using fragments – by creating an assemblage, weaving threads, enjoining parts – in an artisan fashion. This allowed us to develop ethnography of the work carried out by students (authors). From this foundation, we understand the methodology as a relationship that places special attention on how to contact and work with the young people involved in the research; and how to make this process compatible with the needs of a collaborative project.

3. Results and discussion

Evidences for this paper derive from the analysis of part of the data gathered in five ethnographic case studies carried out in five secondary schools. This entails most of the information gathered by the 39 students to develop the five ethnographies, plus the one collected by university researchers through multimedia field-logs. The innovative character of our approach lies in the decision to *train* students as ethnographers so that they could collect and analyse the required data together (Coad, & Evans, 2008). In line with the objectives of the project and the young people' interest, we developed five collaborative ethnographic studies which, although each group could produce its objectives and questions, were focused on the exploration of these questions:

– How and with what do we communicate, express ourselves and learn inside and outside the school?
– What connections, disconnections, complementarities or distances are there between learning inside and outside the school?

The analysis data collected through a collaborative codification process Saldaña (2013), allowed us to generate a complex picture of the continuities and discontinuities students find in their learning experiences, values and understandings when transiting between, in and outside school environments. In the following section we give brief account of the most significant topics using students' voice.

3.1 Connecting formal and informal learning experiences

One of the issues on which all students seemed to agree and emerged in all the ethnographic case studies was the fact that in school everything is more prearranged, is more circumscribed. Every question always has a predetermined right *answer*. Instead, everything is more unpredictable in the life outside. As described by one of the students:

> [...] at school all is very scheduled and moreover everything is already discovered, so we do not have the possibility to learn and discover on our own initiative. In contrast, out of school we have more initiative because everything is to be discovered, and once we learn something, we have more motivation to achieve new knowledge. (Excerpt from the Els Alfacs school students' research report).

This situation has a tipple effect. On the one hand, students feel safer at school where somebody has always the "right answers", where no risk needs to be taken, where as Cuban (1993, p. 27) argues, "teaching is telling, learning is listening, and knowledge is what is in books". But, on the other hand curiosity, agency, motivation and perseverance are poorly developed, preventing students from engaging in more authentic learning processes (Laur, 2013).

This situation brings some students, not all of them, to think they only learn at school, devaluing and being unable to recognize the learning experiences in their daily lives.

> Núria says "inside school appear the gaze and the listening, but you also look and listen outside school". Jaume replied "yes, but you do not learn", with what Núria disagrees. "Of course we learn even more." Núria introduces the concept of "experience", and how she associated it with the way she learns outside. For her, there are things you learn inside school that are of any help for the future, while you learn fundamental things outside. (Excerpt from Rachel and Xavi research report from La Mallola).

An emerging related question is the degree of decision making, autonomy and agency young people have in their learning process inside and outside school. Out of the school, they learn in an informal and autonomous way by producing and editing digital videos, programming webpages, composing, recording and sharing music through the Internet, travelling, watching TV, and talking to friends, family and older people. Instead, they associate what they learn inside school with the notion of traditional learning consisting of memorizing and repeating definitions related to the different curriculum' subjects.

> Out of the school we learn daily things (with parents when you're at home, with friends in the street, using mobile to talk with colleagues, using social networks like Facebook or Twitter...). I have learned things in my father's bar; it is a source of information. (Excerpt from the Sergio's report).
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> "I started making videos four years ago, and the truth is that I am good with it. Little by little, I am searching information about videos, how to make and edit videos, something more professional, every time more professional, to acquire more practice in this area (...) I also make pictures. I have done an online course to learn more (Excerpt from the Yassine's report).
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> In school we learn about subjects that are imposed, not about the matters that we chose. (Excerpt from the El Palau school students' research report).
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> I attend class, I study for the exams, I answer questions and I approve, but after two weeks I cannot remember what I studied (Sergio's statement in a working session).

Young people in our study consider that sometimes what they learn at school somehow help them to better understand the outside world, but what they learn outside in general is not incorporated into the ways of promoting learning inside. They can use what they learn at school to make sense of their surrounding world. What they study in different subjects allows them to name and recognize what previously could not be named or understood; and the cultural references sometimes make them aware of the meaning of the information received and the lived experiences in the outside space.

> What you study, the words help you to understand the news. Little by little you understand better thinks you could not understand before to study. I was told about news I could not understand before. [...] When you are told, you do understand the context better, because you connect what is impacting you with definitions you have been studying at school. (Excerpts from a working session in Ribera Baixa).
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> We better remember what we learn outside school because for us this learning is more meaningful and more related to our experiences (Excerpt from the Ribera Baixa school students' research report).

In contrast, what they learn outside in general is not incorporated into the ways of how learning promoted inside. They do not feel their backgrounds and experiences acknowledged. In 1973, Basil Berstein argued:

> We should start knowing that the social experience the child already possesses is valid and significant, and that this social experience should be reflected back to him as being valid and significant. It can be only be reflected back to him if it is part of learning experience we create. (p. 83).

In 2014 D. C. Phillips asserts:

> Learning is a phenomenon that involves real people who live in real, complex social contexts from which they cannot be abstracted in any meaningful way. […] learners are contextualized. They do have a gender, a sexual orientation, a socioeconomic status, an ethnicity, a home culture; they have interests—and things that bore them; they have or have not consumed breakfast; and they live in neighborhoods with or without frequent gun violence or earthquakes, they are attracted by (or clash with) the personality of their teacher, and so on. (p. 10).

Nevertheless, schools very seldom have students' experiences, knowledge and skills – including digital competence -, into account.

Our research also reinforces the fact that schools seem to have difficulty in helping students to develop the digital competence that, according to the European Commission, "involves the confident and critical use of Information Society Technology (IST) for work, leisure and communication" (EC, 2007, p. 7). And according Catalan Ministry or Education,

> developing working methodologies that help the students to become autonomous, efficient, responsible, critical and reflexive people in the selection, treatment and use of the information and its sources, in different supports and technologies. Critical and reflexive attitudes must also be strengthened in the evaluation of the information available, checking it when necessary, and respecting the rules of behaviour socially agreed in order to regulate the use of the information (Department of Education, 2010, p. 26).

In this sense, although if schools are increasing using of digital technologies in the teaching and learning process, students are still more considered as information receiver than as producers of their own learning.

> The first class is biology. We started taking notes from an interactive website often the teacher uses. From the smart board, the teacher summarizes the most important concepts that need to be written down because they are the foundation of the unit, in this case: The History of Earth and Life. (Excerpt from Ribera Baixa students' research report).

On the other hand, young people make extensive use of social media outside the school.

> I meet new people in Internet forums, where people from other places upload their drawings and comment how they did them and where they did find the inspiration… I read their opinions and apply them in my daily life as a drawer, improving my technique and style (Excerpt from Judith's story).

However, schools tend to limit (or sometimes prohibit) its use.

> Well, at school we have many more restrictions than outside school. The school rules do not allow us to communicate as widely as we would like, because in school we cannot access social websites or use most electronics devices. However, outside of school we have fewer restrictions and more freedom, we can communicate through technologies like mobile, computer [...] for us in and out school are two completely different worlds. (Excerpt from the Virolai school students' research report).

The final considerations made by a group of young people in their ethnographic report in hopes of developing solutions for the problems they believe schools should address, give us clues about the directions of the changes required to change the rules of in the of secondary schooling grammar (Tyack, & Tobin, 1994):

> Many times, teacher and students do not cooperate, because the teacher works alone and doesn't want to solve the students' doubts, or because the student does not listen to the teacher and does not allow other students to be attentive in class. We arrived to the conclusion that teacher and student should work together to achieve the same goal: improving teaching and classroom experiences, helping students to overcome educational barriers and making teaching a more comfortable profession for teachers (Excerpt from the Els Alfacs school students' research report).

Conclusions

Our research shows that learning is not anymore circumscribed to the school setting; that students learn anywhere and by different means. And are students the one who tend to make the effort to connect their inside and outside school experiences.

The school little by little is incorporating digital technology but seems to have difficulties in changing its conceptions about what teaching and learning means, what do they recognise as *legitimate* knowledge, and where people learn.

Students seem better prepared than schools and teachers to recognise and put into practice the four principles for a life-long, life-wide, and life-deep learning (Banks, Au, Ball, Bell et al., 2007, p. 15). That is, that "learning is situated in broad socio-economic and historical contexts and is mediated by local cultural practices and perspectives". [...] "takes place not only in school but also in the multiple contexts and valued practices of everyday lives across the life span". "All learners need multiple sources of support from a variety of institutions to promote their personal and intellectual development". And "learning is facilitated when learners are encouraged to use their home and community language resources as a basis for expanding their linguistic repertoires."

On the other hand, authors such as Lankshear, & Knobel (2001) and Lanham (2006) claim that in a information-saturated world, the most precious commodity is attention. Nobody can pay unlimited attention, but all we claim attention and everybody is asking for it. Everybody is struggling for attention and educational institutions seem not to be in the best position against social media. In this war for attention, schools seem to be the losers. In the media-saturated environment

no sense is left free; there is no more attention span remaining. Saturation produces the lack of concentration and attention and hyperactivity disorders multiply in school, where children increasingly lack the required amount of concentration and attention to accomplish school work. A key issue today is how to educate people who are over-stimulated and feel bored. The crux of the matter is not anymore the pedagogy of the oppressed (Freire, 1970), but the pedagogy of the bored student (Corea, & Lewkowicz, 2004).

The task is massive and the solution is not to be found in more digital technology and more information. The answer has many facets to contemplate and must help schools to become learning environments that foster meaningful learning of both students and teachers. For that both the emerging digital technologies and students' and teachers' cultural and social context should be taken into account.

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