Young people learning from digital media outside of school: The informal meets the formal

El aprendizaje de los jóvenes con medios digitales fuera de la escuela: De lo informal a lo formal

ABSTRACT
The dissonance between what teenagers learn in classrooms and their everyday lives is not a recent phenomenon, but it is increasingly relevant as school systems are unable to follow the evolution of media and society beyond traditional concerns regarding the protection of young people. An overly scholarly view of learning continues to prevail in our society, which seems to marginalize the knowledge that young people develop with and through media and digital platforms. Based on questionnaires, workshops, and interviews conducted with Portuguese teenagers, aged 12 to 16 years old (N=78), attending an urban and a rural school in the North of the country, this paper aims to understand how these teens are learning to use the media, what motivates them, and if their media practices contribute to the acquisition of skills and competencies useful to their lives inside and outside school. The research main results confirm the existence of a gap between formal and informal education. Informal education is mainly motivated by their needs and peer influence. Colleagues and family, alongside the Internet and self-discovery, appear as important sources of knowledge. Another important conclusion is that informal learning strategies contribute to the development of skills and competencies that are useful from a school viewpoint.

RESUMEN
La disonancia entre lo que aprenden los jóvenes en clase y en su vida cotidiana no es un fenómeno reciente, pero es cada vez más relevante, ya que la escuela no es capaz, evidentemente, de acompañar la evolución. En nuestra sociedad, sigue prevaleciendo una visión demasiado escolarizada del aprendizaje, que parece marginalizar los conocimientos que los jóvenes desarrollan con y a través de los medios y de las plataformas digitales. Basado en cuestionarios, entrevistas y talleres realizados con jóvenes portugueses entre los 12 y los 16 años (N=78), de una escuela urbana y otra rural del norte del país, este artículo pretende comprender cómo están estos jóvenes aprendiendo a usar los medios, lo que les motiva y si lo que hacen con ellos contribuye a la adquisición de capacidades y competencias útiles para sus vidas dentro y fuera de la escuela. Los principales resultados de la investigación confirman la existencia de un fosfo entre la educación formal e informal. La educación informal es sobretodo motivada por sus necesidades y por la influencia de sus pares. Los compañeros y la familia, junto con Internet y con lo que descubren por ellos mismos, aparecen como importantes fuentes de conocimiento. También se concluyó que las estrategias informales de aprendizaje contribuyen al desarrollo de capacidades y competencias útiles desde un punto de vista escolar.

KEYWORDS | PALABRAS CLAVE
Young people, digital media, transmedia, informal learning, skills, school, media literacy, qualitative research.
Jóvenes, medios digitales, transmedia, aprendizaje informal, competencias, escuela, educación en medios, investigación cualitativa.
1. Introduction and theoretical framework

This article is centred on young people’s media uses and perceptions, namely the ones related to learning. Within the scope of the international project “Transmedia Literacy”, 78 Portuguese youngsters were enrolled in ethnographic-based research about their media-related informal learning strategies and practices. These youngsters, aged between 12 and 16 years old, are part of a generation with abundant contact with different media—old and new (Delicado & Alves, 2010; Pereira, Pinto, & Moura, 2015b)—and subject to diverse expectations regarding how they are using them and for what. The ways schools are keeping their pace and relevance in their daily lives are also approached, namely by the students’ views on the connection between formal and informal learning sites. Before moving to the presentation of the research and its outcomes, the connection between school and media, formal and informal learning, are briefly discussed.

Schools are sociocultural institutions: their organization and the accreditation of their role are “culturally and historically dependent on societies’ visions of the purposes of education” (Livingstone & Sefton-Green, 2016: 30). Therefore, multiple actors intervene in the definition of what school, as the most relevant instance of formal education, is about. Among those actors are the students; however, their voices are recurrently the least heard. According to Gonnet (2007: 70), “the children’s questions stay outside schools”. Livingstone & Sefton-Green (2016: 3) sustain this same argument based on research with a class of 13 to 14 years old students. The researchers “were struck by the lack of close attention to young people’s voices and experiences” (Livingstone & Sefton-Green, 2016: 31-32). As stated by Sarmento, schools deal not with children and teenagers, but with students: “In a certain way, in front of the institution, the child “dies” as a concrete subject, with its own knowledge and emotions, aspirations, feelings and desires, to give place to the learner, receiver of the adult’s action, agent of prescribed behaviours by which he/she is evaluated, rewarded or punished” (Sarmento, 2011: 588).

Therefore, adults—and broad societal and cultural values—are traditionally the key players that define the purposes of formal education and, alongside it, the very concepts of children and teenagers. Within the traditional school model based on curricula, unidirectional communication and individual assessment (Jonnaert & al., 2006; Erstad & Sefton-Green, 2013; Livingstone & Sefton-Green, 2016), youngsters are too often seen “through the lens of who they might or should become” (Livingstone & Sefton-Green, 2016: 33). According to Pereira (2013: 175), despite more than three decades of growing acknowledgment of the importance of youth’s voice, young people are still recurrently framed “as the adults they will become” and conceptualized by the adults themselves, based on their values and worldviews, often neglecting the ones from youth. Teachers and parents play a crucial role. The first time when they comply—reluctantly or willingly—with the broader educational system; the latter due to their expectations of what school is about— much based on the prospects of reproducing their own experience—and what they believe that should be done as a way of preparing their children to the future. Gonnet (2007: 81) wrote that “the child, the adolescent, inside the classroom, willing or not, brings with him their parents, in his mind”. Those whose voice is left aside (young people) may also accept the externally defined system. For instance, Livingstone & Sefton-Green (2016: 242) “saw young people’s ready internalization of [schools organization towards] standards and metrics, into their everyday talk, interactions, and sense of self”, despite their own concerns seldom being part of what was evaluated. Nevertheless, worries regarding the inadequacy of the traditional school system are recurrent. The expected lack of appeal of the school amidst students, the loss of its hegemonic position as a learning site or its outdated—because inflexible and unidirectional—structure, which neither corresponds with the needs of late modernity nor is synched with the young people’s practices, are frequent arguments (Perrenoud, 1999; Jonnaert & al., 2006; Pérez-Tornero, 2007; Jenkins & al., 2009; Livingstone & Sefton-Green, 2016). According to Erstad & Sefton-Green (2013: 89), the beliefs regarding the effects of digital and online media—allegedly capable of creating a new generation, born within it and being their main users—gave strength to the expectations about the gap between “what is expected in terms of guiding and teaching the young and what they are presented with on a day-to-day basis”.

Analogic and digital media are “the new support for public knowledge” (Pérez-Tornero, 2007: 33). As stated by Buckingham (2003: 189), “there has been a growing acknowledgements that the school is not the only preserve of education; and that learning can and does occur in the workplace, in the home and the context of leisure activities”. According to Gee (2004: 77), “people learn best when their learning is part of a highly motivated engagement with social practices which they value”, and digital media makes it possible. It can easily bring people together based on shared interests and purposes, forming affinity spaces, and their affordances also allow more relational and realistic learning situations (Gee, 2004; Costa, Cuzzocrea, & Nuzzaci, 2014; Aaen & Dalsgaard,
In our society, there is an overly scholarly view of learning, which marginalizes the knowledge acquired by young people in their leisure time, in digital platforms, in peer communication. Curricular learning does not intersect with what they learn outside. Therefore, to respond to the multiple and constant appeals of the digital universe, young people develop learning strategies on their own and with peer groups. The media continue to be a subject only for break time and are hardly recognized as a source of learning; they are seen mainly as a source of entertainment and leisure, also by students.
involved) and the other in a mostly rural area (Montalegre, 35 students). In each school, two classes participated: one from the 7th and the other from the 10th level of schooling.

77 students completed a questionnaire whose main objective was to collect general information about teens’ socio-cultural backgrounds and media access, uses and perceptions. The workshops involved the total sample (78) and consisted of 8 sessions (2 sessions by workshops and by classes). Each class was divided into two groups according to students’ preferences—video games or participatory cultures—and each group performed an activity related to these topics. The workshops enabled the immersive exploration of the teens’ transmedia practices and their informal learning strategies, engaging them in gameplay and media production. For the interviews, five students from each workshop group were invited, totalling 40 interviews. The aim was to deepen the adolescents’ understanding of transmedia practices, with special emphasis on the creative skills and informal learning strategies they perform in video games, content production, and social media.

The study methods are represented in Figure 1.

Based on the data provided by these three methods, this paper aims to contribute to a better understanding of how teenagers are using media in their everyday life and what perceptions they have about media use in the classroom, seeking to understand the relation between informal and formal learning. It also intends to find out how they are learning with media and to what extent their informal learning strategies have an impact on formal education.

This analysis is part of the “Transmedia Literacy” project, whose general goals were to identify teenagers’ transmedia practices from eight European and non-European countries and exploit their transmedia skills and informal learning strategies to improve formal education. The research was not intended to be representative, given its eminently qualitative nature.

3. Analysis and results
3.1. Teen’s media access and uses

The questionnaires confirmed that the youngsters are part of a connected generation: all respondents report having a television at home, a mobile phone and a computer. These are also the three most used devices, with mobile phones taking the lead. A huge majority (74) report having a wi-fi connection and, on a five-point scale—ranging from 1 (totally disagree) to 5 (totally agree)—the statement “I always like to be connected” receives an average score of 4.19. This connection is, for most of them, a synonym of being logged in social media. A great number of students (68) claim that they use social media on a daily basis. That is a frequency of use that only television can approach, with 64 respondents reporting that they watch it every day. The prominent role of social media is corroborated by the answers to the questionnaires’ open-ended questions. Social media was mentioned 38 times when they were invited to complete the sentence “What interests me the most on the Internet is…”.

Regarding social media, Youtube (music and YouTubers’/Gamers’ videos) and Facebook are their favourites. Just two respondents do not use YouTube regularly, and six do not use Facebook. Less used, but still popular, are Instagram (56 users), Snapchat (52) and WhatsApp (48).

Considering variables such as geographical area (urban/rural), age and gender, significant differences were not found. The exceptions were playing video games (mostly a boys’ practice) and creating content intended for online publication (made more frequently by girls). Digital services and platforms have broken somehow the disparities of media access by young people from the urban and the rural areas, although they have not erased inequalities in terms of uses, practices, and opportunities (Pereira & al., 2015a). This brief characterization of the sample’s media

![Figure 1. Portuguese research methodology within the “Transliteracy Literacy” project.](image-url)
access and uses allows framing the analysis below, focused on the role of media at school and in the learning process of these teenagers.

3.2. Media presence at school: Teenagers’ perceptions

Despite being regular media users, their use is mostly confined to the youngsters’ leisure time, being away from school – or rather, from the classroom, because they remain present during breaks. During the interviews, just two students mentioned having learned something about media with their teachers in the classroom. A 15 y/o boy recalled the day his teacher taught him how to create a profile on a social network. A girl of the same age considered that the ICT subject helped her “to work with computers and software”. She goes on to say, “if we want to go a little further, ICT classes are not enough”. So, according to these students, at school, media are only present at recess, rarely becoming a subject of exploitation, conversation or analysis with teachers. The students themselves do not expect too much from their teachers in this sense, drawing a line between these two realities: “They are two different worlds. School is work; videogames are leisure”, stated a 16 y/o boy. Youngsters notice a gap between the reality inside and outside the classroom, but they consider it natural. So natural that it seems they have never thought that media messages and their media practices could be discussed and analysed at school.

The only point of contact between school and media is confined to online safety issues. This approach at school has an impact on the way students behave on the Internet, showing concern and care in publishing contents and in contacting strangers. A 13 y/o boy remembered a talk at his school about precautions in using the Internet, where students were advised: “not to talk with strange people, not to arrange meetings with people they do not know”. A 12 y/o girl answered the question “Have you ever heard about social media at school?” by replying: “Just about dangers”.

These talks mirror a protectionist vision that school still has about media – one that does not necessarily match the youngsters’ concerns regarding online dangers (Giménez-Gualdo & al., 2018). Teenagers did not mention any activity or conversation with teachers aimed at preparing them to critically deal with media, that is, work based on an empowerment perspective.

3.3. Teens’ informal learning strategies with media

Despite few or even no opportunities in the classroom to learn about and with media, which constitute a daily component of their lives, young people learn with media through informal strategies. Through interview and workshop analysis, three main informal learning strategies were often mentioned: trial and error, to imitate/be inspired by someone and search for information, as represented Table 1 and explained below.

While at workshops about video games, participants were unanimous about the best way of learning about them: through trial and error, that is, playing. They were sure that experience is the best way to learn, as illustrated by these statements: “To know about video games I simply play them” (boy, 16 y/o); “I bought the game, and I started playing, and playing, and playing. I often lost, but after a while, I did it” (boy, 14 y/o); “It was by trial and error [that I learnt]” (boy, 12 y/o). Trial and error was also a popular strategy to deal with other media products (Table 1).

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Besides, imitation is also a recurrent strategy. Following YouTubers—gamers, in particular—was a useful mean to learn to play or progress in video games for many teens. As a boy (14 y/o) stated, “Now, everything I’ve learned, so to speak… on YouTube was thanks to him [Tiagovski, a Portuguese YouTuber].” Another boy, 15 y/o, also claimed that he learned by observing other players: “When I started I didn’t know anyone who played. I started watching videos, watching live streams of people playing, I started doing research and trying to learn”. Another boy, 16 y/o, went further: “That’s where YouTube’s magic begins. I always search on YouTube, there are always YouTubers giving advice about how to play”.

Students also use the Internet for other purposes: they go online to search, for example, how to solve problems with mobile phones, apps, and video production. In this context, the Internet (mainly YouTube) allows them to learn more about video games and other leisure activities, but also about school topics or to complete assignments from their teachers.

This conclusion is reinforced by questionnaires. Considering the answers given to the open question “What I learn from the Internet is…”, the important role the Internet plays as a source of both theoretical (“learn things”) and practical (learn “how to do things”) knowledge stands out. The Web emerges as something that students can summon to clarify an issue, satisfy a curiosity, expand their knowledge and learn how to do something, review and further discuss school topics. Inside the category “learn things”, there were ten specific references to the Internet as a source of learning for school topics (about specific subjects, to clarify concepts they didn’t understand in the classroom).

Aside from self-learning, social relationships represent a crucial informal learning strategy. Teenagers resort to schoolmates/friends and family (mainly those who are closer in age: brothers, sisters, cousins) asking for help in diverse subjects. When online, students showed a preference for being in touch with people from their everyday life. Therefore, family and friends also have a great influence on young people’s interest in learning more about a specific topic/application/video game. In the interviews, a lot of examples support this idea: “When I realized all my friends and a lot of people were playing it, I got more interested” (boy, 15 y/o); “At that moment everyone already had one [account on Facebook]. Among my friends I must have been the last” (boy, 16 y/o); “My friends also had a profile, and I wanted to have one to publish my things and so on” (boy, 12 y/o); “Because here in school everybody started playing [8 Ball Pool]. Then, I got addicted” (girl, 15 y/o).

Teens understand the digital media possibilities for socialization, but also their potential contribution to learning. Social media appear in the interviews as an important tool to communicate about school items: “90% of the conversations [he has on Messenger] have to do with school” (boy, 16 y/o); “before tests we take photos of summaries and share them there [on Messenger]” (boy, 15 y/o). A girl, 15 y/o, agrees that social media are useful for school: “Some of us had private tutors, and we were always sharing photos of the notes we took or of the tests we did to practice. It was really nice. [And useful?] Yes, quite a lot. Sometimes, before tests, I send messages to the teachers asking for help… and they help!”.

3.4. The informal meets the formal: Using skills acquired out of school

Considering formal learning as synonymous of school learning in the classroom context and associating the term informal to knowledge and abilities acquired outside the school, it is interesting to see that there are many respondents who consider that they learn with video games and that what they learn is useful to them in a school context.

In this respect, there’s a difference in the sample concerning their geographical context. Students from the rural area have more difficulty realising what they learn with video games, in line with the perception that school and media are two worlds apart. However, the contribution of video games for English improvement is a common perception amongst the sample:

- “I have learned more English with video games than with English classes. Because I need to keep in touch with people on my team, I felt the need to improve my English. Even before League of Legends (LOL), in other games, I used to speak English a lot (…). To study for my English tests I play, LOL” (boy, 16 y/o).
- “Most of the games are in English without translation into Portuguese” (boy, 12 y/o).

Students from the urban school (mainly from the 10th grade) are able to identify other learning skills they develop while playing video games, besides English learning:

- “I think they help in school… In sciences, we are speaking about minerals, and in Minecraft there are a lot of caves with minerals - diamonds, emeralds, gold, iron, charcoal… Before I played Minecraft, I didn’t know charcoal even existed. Then, when we spoke about it in Chemistry and Physics, I immediately remembered Minecraft because I’d already seen there that charcoal comes from wood” (girl, 12 y/o).
“I think we can always learn something with them. For example, with LOL maybe it is more about reasoning speed and things like that because we need to make fast decisions. With FIFA the learning is more about football. Each video game teaches us something according to its context” (boy, 16 y/o).

“Because they make you think about different things at the same time, video games improve reflexes” (boy, 15 y/o).

For a 16 y/o boy, video games are a springboard to find out more about their themes. Shogun 2 fostered his curiosity about the history of Japan, and other games have done the same for World War II. He had been investigating the types of weapons used in that period, their names, and the most important generals of that conflict. However, this was not consonant with the school curriculum. “It is always History of Portugal”, he regretted, adding: “If someone asks me the names of the generals and so on, I know almost everything. What I have been looking for more recently is German tanks because of the game itself”.

To some students, games also constitute a way to develop abilities like resilience, curiosity and surpassing oneself that can be helpful in their studies and in other dimensions of their lives. Different respondents present the self-learning strategy mentioned before not only as an informal learning strategy, but also as a challenge:

- “I don’t feel good when I do it [going online looking for the solution]... then I feel the credit for getting to the end of the game is not all mine” (boy, 15 y/o).

- “I don’t think it is ever really acceptable to use codes because a game is to be unveiled, the goal is to find out a strategy, it is up to us to solve the game ourselves” (girl, 15 y/o).

- “It used to be fun [use tricks] because I couldn’t do anything. Now I can. I also lose but I’ve become better at thinking, and I want to try a little bit” (boy, 16 y/o).

Although students consider they can learn by playing video games, no one has spoken about learning as a motivation to play. They play because it allows them to have fun, to relax, to socialize and to assume different roles.

4. Discussion and conclusions

More than 40 years after Porcher (1974) considered the media an authentic parallel school and Jacquinot (2002) spoke about a peripendicular school, the media continue in many schools outside of the classroom. The data from this study shows a large gap between formal and informal learning practices. As in the past, these two worlds remain separate. The exception seems to be where issues regarding the protection of young people from “inappropriate content and online predators” (Hartley, 2009: 130) are concerned. As boyd (2014) emphasized, most formal education systems do not see digital literacy as a priority because they mistakenly assume that teenagers already know everything as if they were born knowing.

Media uses, practices, experiences and learning enter school with students but are not explored or discussed inside the classroom. This educational, cultural and technological gap between the lives of young people inside and outside the classroom is not a recent phenomenon, but it became even more pronounced in the digital era, with the presence of media everywhere, even carried by students in their own pockets.
only for break time and are hardly recognized as a source of learning; they are seen mainly as a source of entertainment and leisure, also by students.

One of the astonishing aspects of this project was the realization on the fact that students themselves also consider natural the gap between those two worlds. They also identify school as the world of work, learning and effort; and media as the world of entertainment, fun, pleasure. It is not in a natural and immediate way that they regard media as sources of information and learning. However, when these issues are discussed with them, they realize the important role the media play in their lives as a source of information, and they recognize the skills they develop within and from media.

Because of their importance in young people lives, video games deserve a particular mention. Teens perceive video games as positive, allowing them to develop several skills, particularly for learning English as a foreign language, but also for other subjects: Physics and Chemistry, History or Geometry. There are still teens that underline the importance of video games for behavioral and cognitive behavior, for example, self-improvement, resilience, and reasoning, arouse curiosity and teamwork.

It should be noted that the practices and preferences of those who are closer to teens have a great influence on the interests they develop. Thus, family and friends are still important sources of motivation for the informal learning experienced by young people.

Although these data are related only to this sample and cannot be extrapolated, they confirm and help to explain the data from other studies (Pereira & al., 2015a; 2015b) that do not mirror only the Portuguese reality. There are, evidently, interesting media literacy projects in schools, but they are usually punctual and episodic, lacking a policy that supports them. From the data analysis, some explanatory hypotheses for this situation are raised, but they can also be defined as recommendations for effective implementation of media literacy in schools:

• Regarding media and technology, the concerns of educational policies (at least in Portugal) have been essentially related to access (Pereira & al., 2015a) and technical skills. In other words, the emphasis on functional literacy has come at great expense to critical literacy that values aspects such as critical thinking, communication and culture, as recommended by the Portuguese Guide to Media Education (Pereira & al., 2014) promoted by the Ministry of Education itself. Therefore, educational policies should be more precise and more effective in the implementation of media literacy in schools. If school should prepare students for life, for an increasingly digital environment, and the demands of the 21st-century labour market, it is necessary to qualify them not only from a technical point of view but also from a humanist perspective. Also, fostering their critical thinking and empowering them to understand the intensely mediated world in which they live, implementing and going beyond the “The European Digital Competence Framework for Citizens” (Carretero, Vuorikari, & Punie, 2017).

• Strong educational policy in this field has to foresee and be accompanied by a teacher training plan, either initial or in-service training. Teachers teach what they know, the subjects they are trained for and the ones for which they are sensitized and motivated (Pinto & Pereira, 2018). A significant number of documents are produced annually, drawing attention to the importance of conducting Media Literacy programmes and projects, some targeting the young public, other directed at other generations, in a lifelong learning base. This is the case of the recent disinformation phenomenon that could represent a risk for democracy. Teachers should play an important role in empowering students to face the problems of the digital information age, but for that, teacher's training should be supported and media literacy needs to be integrated into all subject-learning, which could demand a new school curricula reform. The present study showed how the media remain outside the classroom and how they continue restricted to break times at school.

• The third and last point is related to the previous two. It defends the need to produce and disseminate resources that support and motivate the development of Media Literacy competencies. In recent years, there has been a significant increase in media literacy resources directed mainly at teachers, as it is the case of outcomes of the European project eMEL – e-Media Education Lab that promoted an innovative and online resource centre for Media Education teacher trainers in (https://e-mediaeducationlab.eu/en/). Also, the Teachers Kit produced within the “Transmedia Literacy” European project that aims to exploit transmedia skills in the classroom (http://transmedia-literacy.upf.edu/en/). Resources are undoubtedly crucial for conducting projects and initiatives, but they are unlikely to succeed unless they are held up to a policy framework that encourages and supports Media Literacy.
Notes

1 For more detailed information on the project methodology: please consult: https://bit.ly/2Bq8MeX

2 Following the classification made by Statistics Portugal (Relatório Tipologia de Áreas Urbanas, 2014), related to the organization of the Portuguese parishes as mostly urban, averagely urban and mostly rural.

References


