# An International Map of Teens' Transmedia Skills

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**Abstract:** The emergence of new media, devices, narratives, and practices has compelled media literacy scholars and professionals to review their theoretical frameworks and methodological approaches. Based on a new concept—*transmedia literacy*—that moves from traditional media literacy (teaching critical media skills at school) to informal learning and practices of participatory cultures, the research behind the present paper aims to understand how new generations are doing things with media outside schools and how they learn to do the things they do. After a short description of the objectives and the methodology, the paper focuses on one of the outputs of this international research (2015–2018) that has involved 8 countries: a map of teens' transmedia skills developed in the context of informal learning environments' collaborative cultures.

## Introduction

Since the diffusion of personal computing in the 1980s and the expansion of the World Wide Web in the 1990s, digital technology has been a catalyst for social change in contemporary societies.<sup>1</sup> Many researchers, institutions, and professionals argue that while the media system has adopted and adapted to new digital technologies, 20 years after the emergence of the Web, schools still perceived the "digital transition" as a traumatic process (EAVI/DTI/OII, 2011). Although schools have made great efforts to adapt to the new sociotechnical conditions in the past two decades, the general perception is that the social life of children, preteens, and teens is built up around a set of digital technologies—from social media to mobile devices—and new practices that are frequently very different from the educational protocols of schools.

The vast diffusion of digital technologies and new media practices has led to the emergence of new conceptions in the academic and professional conversations about media literacy. As early as 2004 Livingstone proposed that research

must investigate the emerging skills and practices of new media users as the meaningful appropriation of ICT into their daily lives. ... A top-down definition of media literacy, developed from print and audio-visual media, while a useful initial guide, should not pre-empt learning from users themselves. (p. 11)

The emergence of new concepts runs parallel to the emergence of new theoretical frameworks and research methodologies. In 2006 Buckingham asked, "What do young people need to know about digital media?" In this research, another question orientates the reflections: How can researchers get to know and analyze what young people are doing with digital interactive media?

In this new context, social and technological changes have reframed the meaning of lifelong (over

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time) and lifewide (across locations) learning (Sefton-Green, 2003, 2006, 2013; Sefton-Green & Parker, 2000), and the emergence of new participatory practices (Jenkins, Clinton, Purushotma, Robison, & Weigel, 2006; Lange & Ito, 2010) has redefined the ways of learning and even the actual concept of "media literacy." In this context the idea of *transmedia literacy* proposes a move from traditional media literacy—understood as teaching critical media skills at school (Potter, 2004, 2005)—to the analysis of practices of participatory cultures, youth-generated contents, and informal learning strategies, and their use inside the formal educational system.

Transmedia literacy is understood as a "set of skills, practices, values, sensitivities and learning and exchange strategies developed and applied in the context of the new collaborative culture" (Scolari, 2018, p. 15). If traditional literacy focused on the written text—it was about teaching reading and writing—and media literacy on the resistance to the television discourse, transmedia literacy places the new digital and interactive experiences in the foreground in terms of the analytical proposal and action. Transmedia literacy does not deny the need to train young people in schools to develop media skills, but rather it expands this framework to include research into the media activities that young people do outside educational institutions and bring this knowledge into the classroom.

#### Transmedia Skills

Young people's level of digital or Internet practices and skills has been analyzed in depth in the last years (e.g., boyd, 2014; Ito et al., 2010; Livingstone & Sefton-Green, 2016). Research into teens' digital and Internet skills has been oriented toward mapping the real level of these skills beyond the "digital natives" mythology. For example, EU Kids Online (Livingstone & Haddon, 2009) analyzed 25,000 European 9–16 year-old Internet users' online activities, skills, and self-efficacy. Although the body of available studies continues to grow, the EU Kids Online team concluded that "there are significant gaps in the evidence base" and recommended expanding the research agenda to include, for example, issues such as how young people use the Internet (Livingstone & Haddon, 2009, p. 2). They proposed carrying out more in-depth research into the following skills:

– Skills of navigation and searching, content interpretation and, especially vital, critical evaluation – all important for media literacy and online learning.

– User-generated content creation and other forms of networking – increasingly important for identity, sociality, creativity and civic participation. (Livingstone & Haddon, 2009, p. 27)

The concept of *transmedia skills* is very close to this research agenda. In the context of the present research, transmedia skills are understood as a series of competences related to digital interactive media production, sharing, and consumption. Previous research in this field (e.g., Jenkins et al., 2006) has identified numerous skills, including playing, performing, appropriating, judging, transmedia navigating, networking, and negotiating. Transmedia skills vary from problem-solving processes in video games to content production and sharing in the context of web platforms and social networks; the creation, production, sharing, and critical consumption of narrative content (fanfiction, fanvids, etc.) by teens is also part of this universe.

# Objectives

The objective of this paper is to present the main outputs of a research carried out in eight countries

(Australia, Colombia, Finland, Italy, Portugal, Spain, the United Kingdom, and Uruguay) with the participation of more than 30 senior and junior researchers. The aim of the research was to understand how young people are acquiring transmedia skills in informal learning settings. This paper will focus on only two of the main objectives of the research:

- To identify the transmedia skills developed by teens;
- To better understand and analyze how teens engage in, develop, and share transmedia skills in informal learning settings.

For reasons of space, other research objectives, such as the identification of informal learning strategies or the analysis of the most popular online platforms where teens acquire new transmedia skills, will not be included in the present paper. The structure of the text is as follows: The Methodology section gives a short description of the qualitative methodology applied; the Results section includes a map of the emerging transmedia skills. The paper finishes with a short set of conclusions and a series of reflections about future initiatives situated at the crossroads where teens, transmedia practices, and learning processes converge.

#### Methodology

As in many other ethnographic works with teens, a series of research constraints and requirements prevented us from using conventional long-term ethnography; therefore, the research team moved toward another set of ethnographic methods. In this context, the team was particularly inspired by the notion of "short-term ethnography," which involves intensive explorations of people's lives, "which use more interventional as well as observational methods to create contexts through which to delve into questions that will reveal what matters to those people in the context of what the researcher is seeking to find out" (Pink & Morgan, 2013, p. 352). In this short-term focus, the ethnographer is situated at the center of the action right from the start and engages participants in the project with this intention clearly stated.

The fieldwork strategy for gathering data was carried out in five complementary steps: (a) schools as the starting point for fieldwork, a secure way to obtain the informed consents of institutions, parents, and teens; (b) an initial questionnaire to get to know the teens' sociocultural backgrounds and media uses and perceptions; (c) participatory workshops to explore in an immersive way the teens' transmedia storytelling practices and engage them in media production and gameplay; and (d) in-depth interviews with the most active teens and media diaries to get to know their doings and sayings with media, social networks, and video games. The last phase of the data-gathering process was an online observation of the teens' favorite websites, celebrities, and online communities (netgraphy).

Fieldwork was carried out in the eight participant countries. Thus far, 1,633 questionnaires, 58 workshops (participatory culture and video games), and 311 interviews have been performed, and eight online communities have been observed. The research focused on teens 12–15 and 15–18 years old from different schools (urban/rural, public/private, homogeneous/heterogonous, high-tech/low-tech, etc.). A series of EU-approved protocols were implemented to preserve privacy and ensure the security of personal data; the protocols included the authorization of schools and informed consents signed by teens and their parents. The team relied on NVivo 11 Pro for Teams for data analysis.

## Results

A series of taxonomies of skills were reviewed in the starting phase of the research, from Bloom's traditional taxonomy introduced in 1956 (Bloom, Englehart, Furst, Hill, & Krathwohl, 1956) to Anderson and Krathwohl's taxonomy (2001). Other contributions that were considered for creating the map of transmedia skills were Ferrés and Piscitelli (2012) and the very well-known contribution by Jenkins et al. (2006), a researcher who identified a series of skills from the analysis of teenagers' media consumption and activities in the United States (e.g., play, performance, simulation, appropriation, multitasking, etc.).

The research team took into account these previous taxonomies to generate a complete and updated taxonomy, which is one of the most exhaustive maps of skills related to media production, consumption, and postproduction in the context of youth transmedia culture: More than 200 main and specific transmedia skills were identified during the research. After analyzing the emerging skills, the research team decided to create a taxonomy that integrates many of the previous classifications. However, this taxonomy does not reject previous (or future) taxonomies.

The transmedia skills were organized into nine dimensions (see Table 1), each of which included 44 main skills, and in a second level, 190 specific skills.

Dimension	Description
Production	This refers to the ability to conceive, plan, produce, edit and/or re-
	appropriate contents through different media platforms and languages (texts, audio, audio-visual, code). This set of skills also involves both
	operational and creative skills.
Content	This refers to the ability to manage different media contents through a
management	range of platforms and media: to select, download, organise and
	disseminate.
Individual	This refers to the subject's ability to self-manage resources and time, and
Management	their own identity, feelings and emotions.
Social	This refers to the ability to communicate, coordinate, organise, lead and
management	teach while gaming and producing collectively. This set of skills also includes skills related to participating in social media.
Performance	This dimension includes all kinds of performing media activities using the
i ononianoo	body, be it in real life scenarios (performing arts) or virtual scenarios
	(videogames). In the specific case of videogames, this set of skills refers
	to in-game and individual activities.
Media and	This dimension includes all the skills related to having knowledge about
technology	socio-political media economies, a subject's personal media diet, and
	technological features and languages. This set of skills also includes skills
	related to taking action regarding this knowledge.
Narrative and aesthetics	This dimension includes skills related to interpreting storytelling and
aestnetics	narrative structures, as well as delving into the narrative construction through the analysis and evaluation of the genres, characters, aesthetic
	features, etc. This set of skills also includes the ability to reconstruct the
	transmedia narrative world.
Ideology and	These skills refer to detecting and analyzing media representations of
ethics	stereotypes (in terms of gender, race, culture, religion, etc.) and ethical
	issues related to copyright, cheating (mainly in videogames) and hacking.
	This focuses particularly on how teens discuss stereotypes, gender
	issues, and intercultural issues, among others. This set of skills also
	includes the behavioural sphere through the actions taken in response to
Distantia	these ideological and ethical topics.
<b>Risk prevention</b>	This dimension includes the skills related to knowing about and taking
	measures in relation to privacy and security in media (in particular social media). This set of skills also includes skills about managing and reflecting
	on their own identity, and possible addictions to media.
	on their own wondry, and possible addictions to modia.

Table 1. Transmedia skills (dimensions).

Depending on the dimension, the organization of the taxonomy of transmedia skills revolves around texts, subjects, technologies, and processes. The skills were organized, when possible, following a path from writing (to write short-stories) to multimodal productions (to film and edit a video), from simplicity (to search content) to complexity (to manage social media and blogs to archive content), from technical (to take photos) to critical and ethical practices (to be aware of the risks of self-exposure on social media), and from cognitive (to recognize and describe genres in different media and platforms) to pragmatic attitudes (to select and consume/quit a content based on aesthetic and narrative values). Figure 1 presents the main 44 skills.

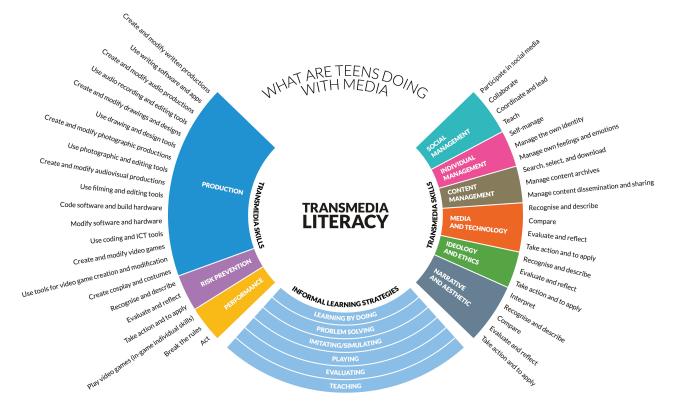


Figure 1. Overview of transmedia dimensions and main skills.

As can be seen, the map presents a comprehensive description of the different skills that may be present in teens' practices. It should be remembered that the transmedia skills that have emerged from this research have been obtained from analyzing a wide-ranging selection of settings in eight different countries and highly diverse teen profiles. In the specific case of the interviews and media diaries, the research team focused on the participants who had excelled in the workshops for their dedication and expertise in participatory culture, social media, and video games (e.g., the most active, the geekiest, gamers who have their own YouTube channel or record gameplays, etc.) and who had expressed interest in continuing to participate in the research.

## Discussion

Unlike previous research into the crossroads where teens, media, and cultural practices converge, the present study did not aim to measure the level of teens' Internet or digital skills. Many studies have already done this both in Europe and the United States with high-level research outputs in terms of skill levels, international comparisons, and so forth (e.g., Livingstone & Haddon, 2009). These studies were particularly important for mapping the territory and orienting the corresponding media literacy actions. As the main questions of the present research were "What are teens doing with media and how did they learn to do it?," the study focused on obtaining a better understanding of and analyzing how teens engage in, develop, and share transmedia skills in informal learning settings. The main output of this part of the research was the map of transmedia skills especially designed for orienting future interventions in the context of (trans)media literacy actions. Consequently, the research team activated the production of a series of didactic activities to take up and apply these skills inside the classroom.

The following is a set of critical issues related to transmedia skills that have emerged from the research. In the first place, it should be said that transmedia skills have a diverse and uneven topography. It should be noted that some of the skills detected are very marginal and developed by only a handful of teens (e.g., the skills related to ideology and values), while others are much more widespread (e.g., productive skills). This is important from the perspective of future (trans)media literacy actions: There is a much higher probability of having teens with an elevated level of productive skills in the classroom than teens with ideological or ethical skills. Media literacy strategies should take up the productive skills and recontextualize them in order to promote a critical approach to media production, sharing, and consumption.

On the other side, the research team confirmed that transmedia skills evolve with the media ecology. While some of these transmedia skills change very little over time (e.g., those related to ideology and values), other skills are subject to incessant technological change (e.g., those related to social networks). Therefore, the skills and the taxonomy proposed by the present research team should be periodically updated according to the accelerated mutations of the media ecology.

Another important issue is that transmedia skills are gender biased. Although it was not an initial objective of the research, the team observed gender differences among teens in relation to their transmedia skills. For example, girls use media focusing on relational aspects (social media) and participatory culture, while boys tend to focus on playful aspects (video games). These observations concur with previous studies of media consumption that have already highlighted the persistence of gender differences among adolescents (Livingstone, Bober, & Helsper, 2005; Shaw & Gant, 2002; Weiser, 2004). As stated by Masanet (2016), gender differences in relation to media uses and consumption are worrying because they indicate that there are two stereotyped spheres in media consumption that connect the girls with more intimate, sentimental, and emotional aspects and the boys with action, violence, and humor.

Finally, it has been observed that teens have already acquired what the team defines as *risk prevention skills*. These skills cover a wide spectrum of situations, from the most basic skills (recognizing and describing how privacy and security measures work on hardware, software, and social media) to the more complex ones (managing relations and contents taking into account privacy and security issues).

As many other similar research projects have shown (boyd, 2014; Ito et al, 2010; Livingstone & Sefton-Green, 2016), not all teens have all of these skills. Indeed, the team detected a broad spectrum of situations, skills, strategies, content production/sharing/consumption processes, and alternative uses of media. In this context of rapid mutation of media environments and cultural practices (possibly one of the most challenging research territories but, at the same time, one of the most difficult to deal with), concepts such as *digital native* (Prensky, 2001a, 2001b) should be completely eradicated from scientific discourses. On the other hand, there is a countermovement from "digital natives" to almost "digital dummies" that considers teens to be passive subjects of the "new technologies" (Dans, 2017). Both figures, the digital "native" and the digital "dummy," have no place in any scientific conversation about teens, transmedia skills, or informal learning strategies. As boyd put it,

Neither teens nor adults are monolithic, and there is no magical relation between skills and age. Whether in school or in informal settings, youth need opportunities to develop the skills and knowledge to engage with contemporary technology effectively and meaningfully. Becoming literate in a networked age requires hard work, regardless of age. (boyd, 2014, p. 338)

The concept of "transmedia skill" was at the center of the present research. The inclusion of the concept of "transmedia" (Jenkins, 2003, 2006; Scolari, 2009, 2013) for defining teens' skills is a clear sign of the centrality that collaborative culture and transmedia production, sharing, and consuming practices have in young people's lives. The same may be said about "transmedia literacy": It is not just a new name for traditional digital or Internet skills but a brand-new approach that considers the subject as a prosumer (producer consumer) and not just a passive and alienated-by-media person. If traditional literacy was book centered or, in the case of media literacy mostly television centered, then transmedia literacy places digital networks and interactive media experiences at the center of its analytical and practical experience (Scolari, 2018).

The present research confirmed once again that the concept of "digital native," understood as a young person who "comes with a built-in chip" and who moves skillfully within digital networked environments, shows more problems than advantages. In this context, studies such as the one presented here make it possible to better understand the media world of teens, and also to establish a knowledge base from which to improve (trans)media literacy actions in the classroom founded in the skills that some teenagers *already* have.

## References

Anderson, L., & Krathwohl, D. (Eds.) (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives.* New York, NY: Longman.

Bloom, B., Englehart, M., Furst, E., Hill, W., & Krathwohl, D. (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain.* New York, NY, and Toronto, Canada: Longman.

boyd, d. (2014). *It's complicated: The social lives of networked teens*. London, England, and New Haven, CT: Yale University Press.

Buckingham, D. (2006). Defining digital literacy. What do young people need to know about digital media?. *Digital Komptanse*, *4*(1), 263–276.

Dans, E. (2017). Jóvenes y redes sociales Más complejo de lo que parece. *TELOS*, *107*, 95–97.

EAVI/DTI/OII (EAVI, Danish Tech Institute, Oxford Internet Institute). (2011). *Testing and refining criteria to assess media literacy levels in Europe final report*. Retrieved from https://publications.europa.eu/en/publication-detail/-/publication/4cbb53b5-689c-4996-b36b-e920df63cd40

Ferrés, J., & Piscitelli, A. (2012). Media competence. Articulated proposal of dimensions and indicators. *Comunicar*, *38*, 75–82. doi:10.3916/C38-2012-02-08

Ito, M., Baumer, S., Bittanti, M., boyd, d., Cody, R., Stephenson, B. H., ... & Tripp, L. (2010). *Hanging out, messing around, and geeking out: Kids living and learning with new media*. Cambridge, MA: The MIT Press.

Jenkins, H. (2003, 15 January). Transmedia storytelling. *MIT Technology Review*. Retrieved from http://www.technologyreview.com/biomedicine/13052/

Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. New York: New York University Press.

Jenkins, H., Clinton, K., Purushotma, R., Robison, A., & Weigel, M. (2006). *Confronting the challenges of participatory culture: Media education for the 21st century*. Chicago, IL: John D. and Catherine T. MacArthur Foundation.

Lange, P., & Ito, M. (2010). Creative production. In M. Ito, S. Baumer, M. Bittanti, d. boyd, R. Cody, B. H. Stephenson, ... & L. Tripp, *Hanging out, messing around, and geeking out: Kids living and learning with new media* (pp. 243–293). Cambridge, MA: The MIT Press.

Livingstone, S. (2004). Media literacy and the challenge of new information and communication technologies. *The Communication Review*, *7*(1), 3–14

Livingstone, S., Bober, M., & Helsper, E. (2005). Active participation or just more information? *Information, Communication and Society, 8*(3): 287–314. doi:https://doi.org/10.1080/13691180500259103

Livingstone, S., & Haddon, L. (2009). *EU kids online: Final report* (EC Safer Internet Plus Programme Deliverable D6.5). London, England: LSE/EU Kids Online.

Livingstone, S., & Sefton-Green, J. (2016). *The class: Living and learning in the digital age*. New York, NY: NYU Press.

Masanet, M.-J. (2016). Pervivencia de los estereotipos de género en los hábitos de consumo mediático de los adolescentes: Drama para las chicas y humor para los chicos. *Cuadernos.info*, *39*, 39–53. doi:https://doi.org/10.7764/cdi.39.1027

Pink, S., & Morgan, J. (2013). Short-term ethnography: Intense routes to knowing. *Symbolic Interaction*, *36*(3), 351–361.

Prensky, M. (2001a). Digital natives, digital immigrants: Part 1. On the Horizon, 9(5), 1–6.

Prensky, M. (2001b). Digital natives, digital immigrants: Part 2: Do they really think differently? *On the Horizon*, 9(6), 1–6.

Potter, W. J. (2004). Theory of media literacy: A cognitive approach. Thousand Oaks, CA: Sage.

Potter, W. J. (2005). *Media literacy* (3rd ed.). Thousand Oaks, CA: Sage.

Scolari, C. A. (2009). Transmedia storytelling: Implicit consumers, narrative worlds, and branding in contemporary media production. *International Journal of Communication*, *3*, 586–606. doi:http://dx.doi.org/1932-8036/20090586

Scolari, C. A. (2013). Narrativas transmedia. Cuando todos los medios cuentan. Barcelona, Spain: Deusto.

Scolari, C. A. (Ed.) (2018). Teens, media and collaborative cultures: Exploiting teens' transmedia

*skills in the classroom*. Barcelona, Spain: Transmedia Literacy H2020 Research and Innovation Action/ Universitat Pompeu Fabra.

Sefton-Green, J. (2003). Informal learning: Substance or style? *Teaching Education*, 4(1), 37–52.

Sefton-Green, J. (2006). *Report 7: Literature review in informal learning with technology outside school.* London, England: Future Media Lab.

Sefton-Green, J. (2013). *Learning not at school: A review for study, theory and advocacy for education in non-formal settings*. Cambridge, MA: The MIT Press.

Sefton-Green, J., & Parker, D. (2000). *Edit play: How children use edutainment software to tell stories*. London, England: British Film Institute.

Shaw, L. H., & Gant, L. M. (2002). In defense of the Internet: The relationship between Internet communication and depression, loneliness, self-esteem, and perceived social support. *CyberPsychology* & *Behavior*, *5*(2), 157–171.

Weiser, E. B. (2004). Gender differences in Internet use patterns and Internet application preferences: A two-sample comparison. *CyberPsychology & Behavior*, *3*(2), 167–178. doi:10.1089/109493100316012.

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