



Postdigital Storytelling: Storytelling (Within or Across) the Digital and Transmedia Field

Rafel Meyerhofer-Parra¹ · Juan González-Martínez¹ ·
Marta Peracaula-Bosch¹

Accepted: 2 May 2024 / Published online: 16 May 2024
© The Author(s) 2024

Abstract

The term postdigital implies a rupture and continuity of the digital paradigm, which allows us to analyse the challenges implied by a largely digitalised society. At the same time, the term transmedia goes completely unnoticed in the postdigital literature, despite sharing key elements in its reflection on the digital paradigm. For this reason, this article reflects on the points of contact between transmedia and postdigital storytelling, as well as the differences identified between postdigital storytelling and its precedents: digital storytelling and transmedia storytelling. It is discussed that postdigital storytelling becomes an evolution of digital storytelling in congruence with the challenges posed by the postdigital paradigm and, simultaneously, that transmedia storytelling can adopt a postdigital perspective under which to balance the media it uses, while maintaining its essence of narrative expansion, which is a dispensable condition in digital and postdigital storytelling. Finally, an analogous reflection to the digital term emerges that more and more the transmedia nature is intertwined and diluted in the context that surrounds us to the point that it ceases to make sense.

Keywords Postdigital · Transmedia storytelling · Digital storytelling · Media in education

Introduction

From the approach of critical pedagogy, in a neoliberal society, the education system should further guarantee the acquisition of digital, media and transmedia skills by the population, so that they can exercise full citizenship in an increasingly digitalised world (Mesquita-Romero et al. 2022). In these coordinates, asking whether it still makes sense today to continue talking about a digital context, reflecting on the challenges that

✉ Rafel Meyerhofer-Parra
rafel.meyerhofer@udg.edu

¹ Department of Pedagogy, University of Girona, Plaça de Sant Domènec, 9, Facultat d'Educació i Psicologia, 17004 Girona, Spain

technology holds for us and analysing how the problems and hopes projected in digital technologies have been reconceptualised in educational terms (Hayes 2019; Morozov 2014; Rahm 2023) become a critical exercise that turns the way in which we observe and analyse the educational imaginary. It is an exercise, then, that is born in critical pedagogy and that proposes, under these approaches, the term *postdigital*.

The term *postdigital* emerged around the 2000s (Cascone 2000), but it was not until a decade later that it was introduced into the field of education. Conceptually, it is difficult to define, and Cramer even states that it is ‘a term that sucks but is useful’ (Cramer 2015: 13), useful in that postdigital serves as a pretext for reflection, and such reflection depends on how the prefix *post* is understood.

According to Knox (2019), there are different ways of understanding the term: first, as post-dating the stage at which digital technologies have emerged and settled, an epochal shift in the perception and use of technology; second, as a critical appraisal of the assumptions on which the general understanding of digital is based. Indeed, the plurality of meanings and the challenges identified in the literature lead to the assertion that ‘postdigital is hard to define; messy; unpredictable; digital and analog; technological and non-technological; biological and informational. The postdigital is both rupture in our existing theories and their continuation.’ (Jandrić et al. 2018: 893) There is perhaps no better way to highlight the liquidity of the concept, concordant with the time that has seen its birth.

However, as a result of the apparent contradiction of talking about the shift to a postdigital paradigm in a largely digitalised world, reflection in the field of education is leading to an analysis of the changes involved in moving the digital from the centre, contextualising it in a complex framework in which the digital is diluted, converges and hybridises with other literacies and is naturally integrated into everyday life as another element (Jandrić et al. 2018).

Reflections from a postdigital perspective include the following: the breakdown of the dichotomy between digital and analog (Berry and Dieter 2015; Cramer 2015; Cramer and Jandrić 2021; Fawns 2019); reflections on literacies in the postdigital context (Bhatt 2023; Fawns 2019; Campbell and Olteanu 2023; Jandrić and Hayes 2020); the use or meaning that talking digitally can have, even today (Cramer 2015; Fawns 2019); and the challenges associated with new technologies such as the datafication of teaching processes; the increased use of digital technologies in the governance of education; the sustainable management of resources and the exploitation of labour involved in the development of such technologies (Knox 2019). Likewise, the postdigital paradigm highlights literacies such as ecopedagogy (Jandrić and Ford 2022) and biosemiotics, within which the term *Umwelt* is recovered, which represents this idea of fleeing from the current (false) dichotomy between analog and digital: ‘it [the *Umwelt*] helps bridge *multimodality* with postdigital philosophy by avoiding the dichotomization of *natural environment* and *technological medium*.’ (Campbell and Olteanu 2023).

However, transmedia literacy (Scolari 2018), which is especially linked to New Media Literacies (Jenkins et al. 2009), is not connected or developed within the postdigital literature. Although a priori points of convergence are identified, which will be exposed during the article, it is possible that its proximity to media

literacy—but also to digital literacy—causes it to be omitted in the specific literature, transitioning from the digital to the postdigital context without considering the notion of transmedia.

For this reason, this article aims to delve into the points of contact and the differences between the transmedia vision (Jenkins 2006) and the postdigital vision, as well as their didactic approaches based on storytelling: transmedia storytelling and postdigital storytelling (Jordan 2019). However, it also briefly discusses digital storytelling, as it relates to postdigital storytelling in the digital-postdigital binomial and allows us to consider what challenges digital storytelling faces, and what challenges the other storytelling-based approaches face.

Storytelling: From Digital Storytelling to Postdigital Storytelling

Humans have always had the need to tell stories, and storytelling has been a commonly employed strategy for the transmission of knowledge. Stories have been transmitted in numerous forms including gestural, orally and written. The multiple benefits generated by the use of storytelling in learning processes are well known: its ability to generate commitment through the incorporation of a narrative; the emotional connection that can be generated by learners (Ferrés and Masanet 2017); the connection with their daily lives; facilitating the development of scaffolding in their learning process; and allowing the design of proposals that work on competence development.

The use of storytelling as a strategy for transmitting knowledge has been evolving and adapting to the media ecology that surrounds us. Today, there is a more plural use of storytelling-based strategies than ever before, the most recent being digital storytelling, transmedia storytelling and postdigital storytelling.

At the end of the twentieth century, various initiatives based on the creation of stories emerged, including the Center for Digital Storytelling (DS), established in 1993 with the aim of exploring the potential of digital storytelling. Specifically with a vision that wants to ‘enhance the power of personal, community-situated, voice as an instrument of change’ (Jordan 2019: 17). A definition of digital storytelling can be the following:

Educational Digital Storytelling [EDS] is understood as facilitated production of a short digital story in an educational community setting. The story usually contains some mixture of digital images, text, recorded narration, and/or music. This definition further extends Lambert’s initial definition of DS as a short, narrated film (2013) and highlights its two features in the current context. Firstly, EDS is facilitated media production (Lambert 2013). Facilitation in the production process, usually by trained teachers and/or researchers, distinguishes it from constructed media in the online environment (e.g., *Second Life* or *World of Warcraft*) or *Do it Yourself* media (e.g., *YouTuber-generated video*) (Lambert 2013). Moreover, EDS studies in this review take place in an educational community setting. (Wu and Chen 2020: 2)

However, for more pragmatic purposes, educational digital storytelling is starting to be used intentionally in teaching and learning processes to work on digital literacy, often understood as digital competence (Buckingham 2020), as it helps to develop twenty-first-century skills such as digital, technological, information and visual literacies. In practice, digital storytelling is still generating much interest today (Wu and Chen 2020) for its potential in the use and integration of technology in teaching and learning processes (e.g., Chan et al. 2017; Kim and Li 2021), for the motivation generated in the learning process (e.g., LaFrance and Blizzard 2013; Kim and Li 2021) and especially for the flexibility and plurality of educational contexts in which it can be applied. Moreover, within digital storytelling, personal digital storytelling is highlighted for being stories narrated in the first person that generate a strong desire for agency (Lambert 2013).

In general terms, however, Wu and Chen (2020), in a systematic review of educational digital storytelling, summarise some very positive outcomes within the experiences analysed, a fact that promotes storytelling-based methodologies as a didactic approach. Wu and Chen (2020) also take the opportunity to emphasise an optimistic view of the results and point to the possibility of the novelty effect, to which they add the fact that less positive results tend to be less published.

In line with the use of digital storytelling strategies, transmedia storytelling which is ‘a particular narrative structure that expands through both different languages (verbal, iconic, etc.) and media (cinema, comics, television, video games, etc.). TS is not just an adaptation from one media to another’ (Scolari 2009: 587), was introduced a few years later. The use of transmedia storytelling approaches is a further step towards the literacy process of the competences required for the twenty-first century, especially in relation to navigating through media complexity, Web 2.0 and New Media Literacies (Jenkins et al. 2009), as well as a form of generating making coordinated meanings with all these various media and genres (Lemke 2009). However, in line with Wu and Chen (2020), transmedia storytelling has also been added to this novelty effect, and in general, the results analysed are also optimistic (Meyerhofer-Parra and González-Martínez 2023c). Are events going to repeat under postdigital storytelling? First, we shall examine how the evolution of transmedia storytelling helps us to understand postdigital storytelling.

Origin, Evolution and Challenges of Transmedia

The term transmedia, in the same way as the term postdigital, has its origins in the field of music, when Stuart Saunder Smith in 1975 used *trans-media composition* in *Return and Recall* referring to ‘the composition of different melodies, harmonies and rhythms for each instrument and musician outside a composer who complements the song in coherent harmony and synchrony with other musicians and composers’ (Freire 2020: 5).

Years later, Kinder (1991) used it in the field of communication as ‘transmedia intertextuality’ to refer to the expansion through different media and forms of expression. However, it was not until Jenkins (2001, 2003), through his blog on the website of the Massachusetts Institute of Technology, that a first conceptualisation

of what *transmedia* is and its best-known meaning, *transmedia storytelling*, was elaborated, which the author later developed in *Convergence Culture: Where Old and New Media Collide* (Jenkins 2006).

In *Convergence Culture*, Jenkins offers a first definition of transmedia storytelling:

A transmedia story unfolds across multiple media platforms, with each new text making a distinctive and valuable contribution to the whole. In the ideal form of transmedia storytelling, each medium does what it does best [...] Each franchise entry needs to be self-contained so you don't need to have seen the film to enjoy the game, and vice versa. Any given product is a point of entry into the franchise as a whole. Reading across the media sustains a depth of experience that motivates more consumption. Redundancy burns up fan interest and causes franchises to fail. Offering new levels of insight and experience refreshes the franchise and sustains consumer loyalty. (Jenkins 2006: 95–96)

In addition to the definition, Jenkins synthesises in his work some of the challenges resulting from the progressive evolution of the media landscape, a media ecology (Scolari 2012) that becomes a catalyst for the materialisation of transmedia storytelling processes.

Fundamentally, Jenkins highlights the shift from the figure of the content consumer to the prosumer (Bruns 2008; Toffler 1980). Prosumers are 'individuals who consume and produce value, either for self-consumption or consumption by others, and can receive implicit or explicit incentives from organizations involved in the exchange a combination of ability of producing and consuming' (Lang et al. 2020: 178), and this shift is possible due to three key elements: collective intelligence (Lévy 1999), as knowledge is fragmented and only fragments of it are accessible; participatory culture, given the option to collectively construct this knowledge; and media convergence, as content is expanding across multiple media, and cooperation between media generates the migration of people between platforms for accessing and constructing content. Thus, access to content is now a process expanded over time, where users are expected to become gatherers and hunters of pieces of the story, and to access the unified and coordinated experience, they must navigate across the media, unfolding different pieces of the story (Jenkins 2003).

However, Pratten and Scolari emphasise that transmediality is not a novel aspect, as any communication has a transmedial nature (Scolari 2013; Sánchez-Mesa et al. 2016). In the same sense, in fact, Kalogeras (2021) theorises the bible as transmedia storytelling, in that it has a transversal narrative across media.

Nevertheless, despite not being a novel aspect in itself, the media change generated by the emergence of the Internet and the development of Web 2.0 strengthens the transmedia approach, while showing substantive changes in the generation of knowledge, participation and navigation through content (Sanchez Mesa et al. 2016).

Therefore, the changes described by Jenkins' contributions, together with the identified challenges of media literacy (Buckingham 2003) and transmedia, lead to the approach of New Media Literacies (Jenkins et al. 2009; Reilly 2013), a set of skills that are considered necessary to face the challenges of a more digitalised media ecology and that help to be able to follow the expansion of knowledge and participation in the media ecology.

Moreover, it is worth noting Jenkins' (2006) forgotten subtitle 'Where Old and New Media Collide', since talking about both convergence culture and transmedia and its didactic approaches is not just a digital approach: it is precisely to emphasise that all media count (Scolari 2013) relate to each other and participate in the expansion, participation and creation of content. We will subsequently explore the extent to which this is one of the crucial points of contact between postdigital and transmedia.

Consequently, and focusing on the educational approach, as Piscitelli would say in Scolari (2010), there is a shift from *pedagogies of individual enunciation*, which are characterised by being monomediated and with a single enunciator who transfers knowledge to a passive student body, to *pedagogies of participation*, which are transmediated, with a collective enunciator who constructs the story and with a student body that participates in a collective construction of knowledge.

Therefore, didactic approaches based on transmedia seem to be a good choice for addressing educational competences and challenges, since they promote engagement through storytelling, facilitate the acquisition of twenty-first-century skills, digital and transmedia competences and connect with forms of learning and knowledge used in informal contexts. The most commonly used didactic approach in the development of transmedia literacy is transmedia storytelling (e.g. Albarello and Mihal 2018; Molas-Castells and Rodríguez-Illera 2018; Nagy et al. 2022), given the motivation generated by storytelling processes (Bruner 1986; Egan 1986), but this is only one of the possible approaches that coexists with others: *transmedia play* (Alper and Herr-Stephenson 2013; Dickinson-Delaporte et al. 2020), *transmedia contenttelling* (Meyerhofer-Parra and González-Martínez 2023b) and *transmedia storybuilding* (Wiklund-Engblom et al. 2013), among other approaches that can be identified under the umbrella of what is generically called transmedia educational practices (González-Martínez et al. 2019).

However, while conceptually presenting a significant opportunity to develop literacies with the learner at the centre of the process and to integrate and develop knowledge, skills and competences from the informal context into the formal one (Scolari 2018), the practical implementation often falls short.

According to Meyerhofer-Parra and González-Martínez (2023a), conceptually, in Jenkins' (2006) definition, the framework where most of the transmedia storytelling proposals are supported, conceptually diverse uses are identified that even omit the use of a narrative, which makes it difficult to identify and conceptualise what uses and practices are carried out under the concept of transmedia storytelling. Likewise, Dalby (2021), Jenkins (2017) and Scolari et al. (2019) highlight the sematic abuse generated when addressing the term transmedia 'given a variety of overlapping uses, interpretations and definitions of the term, as well as its potential for continual evolution as technology and content-use progresses' (Dalby 2021: 1).

However, although it is true that there is a conceptual evolution in the term transmedia storytelling (Jenkins 2006), for the most part, these contributions are not integrated into the practices or under the conceptualisation of transmedia storytelling. In fact, this is not an isolated case and it happens in other concepts transferred to the educational field, as in the case of the evolution of the definition of Wing within computational thinking (Peracaula-Bosch and González-Martínez 2023). Such transfers often incur significant costs, characterised by weakened conceptualizations in the educational context.

Examples of the progressive evolution of transmedia storytelling are the contributions of Dena (2009), who reflects on the value of the repetition of content in different media; the nuances of Jenkins (2007, 2011) in the definition of Jenkins (2006); the definition of Scolari (2009) from the perspective of semiotics and narratology; the extension of Jenkins (2011) to other transmedia approaches, or logics; or the evolution of the challenges posed by participatory culture (Jenkins et al. 2015).

In addition to the challenge of conceptualising transmedia narratives, there are other challenges in approaching transmedia storytelling as a didactic approach. In a systematic review of transmedia storytelling practices, Meyerhofer-Parra and González-Martínez (2023c) identify within transmedia storytelling practices a strong emphasis on the use of tools, skills and competences linked to the digital context, linked to digital and transmedia literacies, with low use of other literacies. Thus, what was initially described as a collision between old and new media practically becomes a substitution and to a large extent a digitisation of learning processes.

In addition, transmedia literacy is generally produced in informal contexts, supported by digital networks (Scolari 2018). As a result, formal transmedia-mediated teaching processes play a marginal role, and if they are used, the skills employed in the formal context are less than those used in self-learning processes in the informal context.

In this way, the challenge of providing digital and transmedia literacy is a major and difficult one to address. In fact, it often ends up focusing on a digital competence challenge, especially with reference to information literacy (Buckingham 2020), and it is in formal and informal, largely digitalised contexts that they are expected to develop the rest of the competences. However, delegating the development of competences and skills outside the formal context, especially with regard to the digital domain, generates subsequent limitations that are not necessarily of use, given technological immersion, but often of empowerment (Van Dijk 2017).

Within the intricate framework presented, one may initially conceive a promising pedagogical approach, replete with optimistic prospects. However, it is imperative to acknowledge the presence of notable challenges alongside these auspicious facets. In fact, Farag et al. (2020) highlighted how, despite the fact that we find ourselves in a context where education is increasingly globalised, the risks described in Freire's conception of the *banking model* also emerge. Thus, in this complex framework, we arrive at postdigital storytelling.

Postdigital Storytelling

For the moment, the term postdigital storytelling has been little explored. Jordan (2019), offers a first approximation of the term and does so by gathering five elements as the basis of the postdigital perspective: (1) the hybridisation of the digital and non-digital domain, (2) the ubiquity and fluid negotiation between the two domains, (3) its functioning within or across the digital/non-digital nexus, (4) the dominance of the postdigital modality; and (5) that the non-digital domain is subordinate to the digital one.

In reference to storytelling, his starting point is two questions: “What is digital storytelling in the postdigital era?” and, “What impact does hybridisation and transmediality have on our understanding of digital storytelling?” (Jordan 2019: 64).

Of the approaches and issues raised by Jordan (2019), it is worth noting that, firstly, he always focuses his analysis on the use it can have in the field of arts and humanities, and especially in creative writing. Therefore, note that they may not necessarily be the same for the educational domain.

However, his reflections indicate that (a) he considers digital storytelling as the precedent of postdigital storytelling, without going through transmedia storytelling; (b) postdigital storytelling equals digital storytelling in the postdigital era; and (c) postdigital storytelling requires the notion of transmedia.

In short, the approach to postdigital storytelling is the analysis of digital storytelling in a postdigital context, but this seems a simplistic approach: it leaps from digital storytelling to postdigital storytelling without considering the concept of transmedia storytelling, of which it only visualises elements of hybridisation. However, transmedia storytelling not only involves the aforementioned hybridisation; it involves a paradigm shift in the role of prosumer, which implies the introduction of elements such as remixing, participatory culture and narrative expansion by the user, facts that allow us to understand the acquisition of competencies that are not necessarily digital but analog, and also transmedia (and the new media literacies). These are elements present in postdigital storytelling, as it has a broad vision of multiliteracies and less emphasis on the digital part. In doing so, Jordan (2019) makes an exercise of contrasting the digital and postdigital binomial, but leaves behind the perspective of transmedia storytelling, and it is in this perspective where key elements for understanding postdigital storytelling can be found.

Therefore, considering the existing points of contact between transmedia and postdigital, the following is a reflection on what postdigital storytelling is, whether it is a continuation or a change, and whether it solves some of the challenges that transmedia storytelling has to face.

Figure 1 shows the contact points resulting from the intersection of transmedia and postdigital.

As can be seen in Fig. 1, the points of contact are (a) the perceived unhelpfulness in dividing between analogue and digital, which was already noted; (b) that the media are deeply connected, where postdigital emphasises how digital is integrated into everyday life; and (c) cultural and social changes, where (V) the transmedia approach highlights cultural implications and links it to the fan phenomenon, while postdigital highlights much broader social and cultural elements.

The particularities are that (I) transmedia focuses on the expansion generated through media, while postdigital does not explicitly address it. (II) Although in both transmedia and postdigital the analog is subordinated to the digital, postdigital emphasises this imbalance in order to consider its implications, and transmedia only accepts or describes it. (III) The focus on literacies on the part of transmedia is mostly on digital and transmedia, while postdigital goes a step further and connects with other social, cultural and environmental concerns, which go beyond the apprenticeships often needed by the industry.

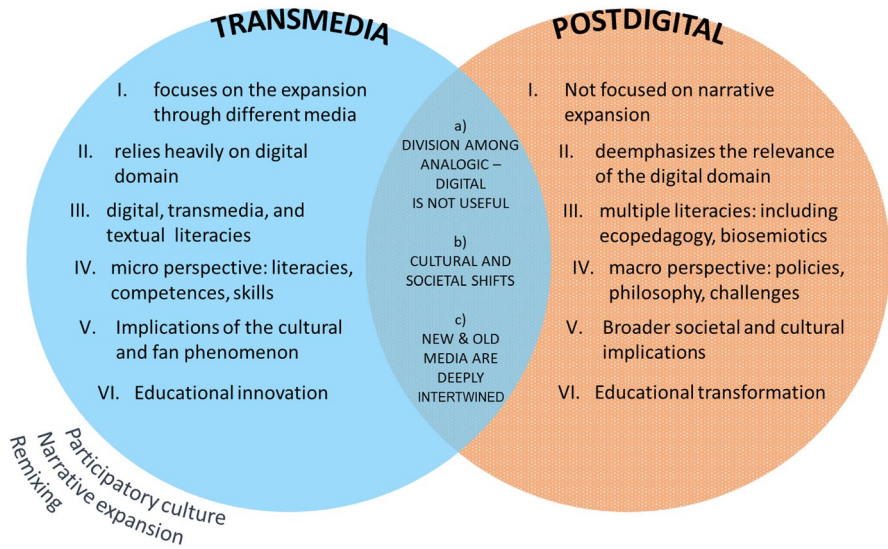


Fig. 1 Comparison between transmedia and postdigital with their points of convergence and divergence

Consequently, IV and V show how transmedia has a focus on micro aspects such as literacies, competences and skills, while postdigital focuses on macro aspects of policy and society. In sum, to the aspects mentioned in points I–V, it can be stated that in VI, while transmedia education implies a change and innovation in teaching processes, it does not entail a deep reflection on grammar or teaching and learning processes. In general, transmedia narratives are incorporated into teaching and learning processes for competence acquisition, but this is not linked to a profound conceptual change and reflection, which is the case with the postdigital perspective. Therefore, while transmedia approaches are innovative (competence acquisition, improvement on what already exists), postdigital approaches are renovating (profound changes in the established dynamics).

All in all, we can see that the transmedia and postdigital perspectives share a vision that shares some elements, although the viewpoint differs significantly: the transmedia perspective focused more on practices, while the postdigital perspective focused on macro elements.

Therefore, and considering Jordan's (2019) initial idea of digital storytelling as a precedent to postdigital storytelling, Fig. 2 shows the interaction between digital storytelling, transmedia storytelling and postdigital storytelling through four different situations (A–D).

If option A is considered, it identifies Jordan's (2019) approach to the postdigital look towards digital storytelling, a view that primarily takes into consideration a digital storytelling that has evolved into the postdigital context, and in which there is a great deal of digital dominance over non-digital. In fact, it is an emerging position within digital storytelling, supported by authors such as Lambert and Hessler (2018), in which it is already understood that despite being digital storytelling, it is not exclusively digital. However, position A does not use narrative expansion and

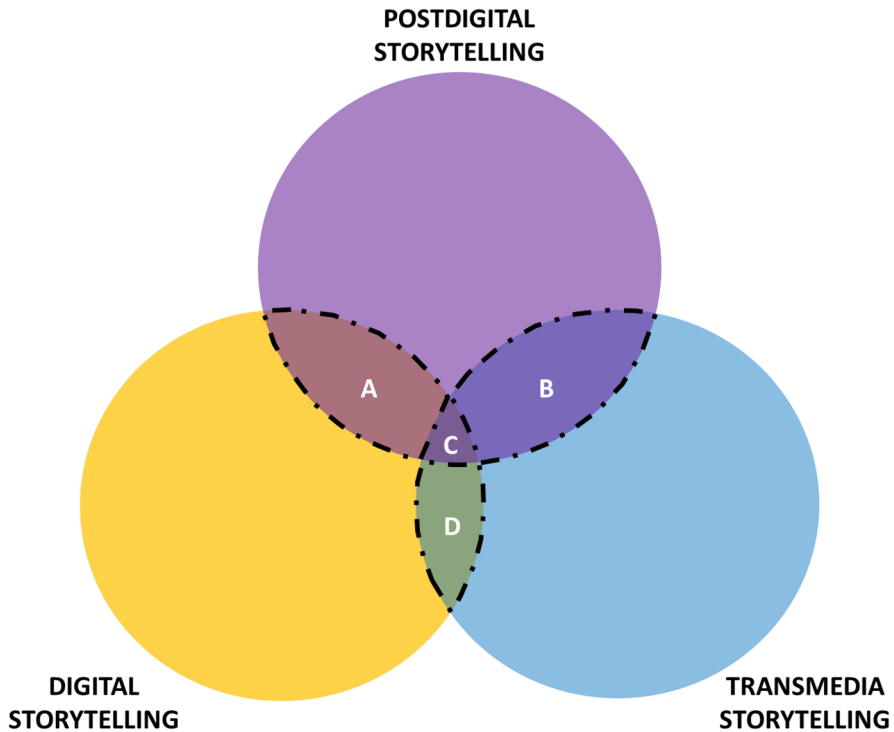


Fig. 2 Possible scenarios and interplay between digital, transmedia and postdigital storytelling

hybridisation across media, although it does reflect on the integration of digital and analog and the challenges and ideology behind the use of technology.

In reference to B, the situation of transmedia storytelling in the postdigital context is discussed. In this approach, the weight of the digital context in transmedia experiences is rebalanced, while at the same time, an expansion of content across media is realised. In this approach, in addition to digital and transmedia literacies, which are the most developed in the context of transmedia storytelling, it takes a much broader view of literacies and takes advantage of the challenges posed by the postdigital paradigm to reflect on and incorporate its literacies.

Focusing on D, we identify a situation mediated by transmedia storytelling that incorporates part of digital storytelling. Therefore, there is a hybridisation between the media, and the expansion of narrative through them is contemplated, but digital tools and resources are identified as a priority. The reflection and challenges proposed by the postdigital paradigm are not taken into consideration, and it is a vision that is very close to that of transmedia storytelling as it has been used in existing educational practice.

Finally, in C, we can observe the convergence of the three elements so that, on the one hand, (i) an expansion across media is identified, which is characteristic of transmedia narratives; (ii) a significant weight of the digital domain is identified, in line with digital storytelling approaches; (iii) although there is a significant digital

domain, the weight of the digital domain is reconsidered, other literacies are taken into consideration and a holistic vision is provided to the social, technological and cultural challenges.

It is a critical exercise of reflection towards a broader vision of media ecology and a commitment to the hybridisation of media and resources, which breaks with the digital/non-digital schemes and proposes a media ecology where the use of media, above all, is based on the adaptation to contextual needs, where we must critically reflect on when and how to use them so that a typewriter in the park is not a *hipster* exercise, but perhaps the best solution to avoid software distractions, enjoy greater autonomy on the device and type as fast as typing allows.

Conclusions

The term postdigital storytelling is a continuation and a rupture with digital and transmedia storytelling, a continuation, therefore, that considers the digital elements, fundamental in digital storytelling and the hybridisation through the media, present in the transmedia proposal. In the latter, all media count, and it is not necessary to categorise between digital and non-digital.

However, it is also a rupture: first, because it does not require narrative expansion across media as in transmedia narratives; second, because of the weight given to different literacies, where the digital is not fundamental; and lastly, because of the critical view through which it analyses and interprets the media, the use and role of technology.

Therefore, the contribution of the term postdigital storytelling breaks and continues. It brings a less focused look at the digital and non-digital domain. It also rethinks the value of certain literacies and the challenges that transmedia storytelling could aspire to reconsider in media hybridisation, which in practice has been largely digitised, and in the lack of need for classification in the digital-non-digital binomial.

Returning to the subtitle of *Convergence Culture* (Jenkins 2006), although transmedia analysed the moment when *new and old media collide*, this collision is already adopted as a matter of course by many. The New Media Literacies (Jenkins et al. 2009; Reilly 2013) are a set of skills widely used and naturally integrated into our daily lives, and the fact that they are now considered new media literacies should make us think that we are under a significantly different paradigm. In fact, if Cramer (2015) defined the term postdigital as something ‘that sucks’ and emphasised its expiration in time, the new media literacies are the maximum exponent of this. Does it still make sense to call them *new*? Absolutely not.

In fact, the challenge of postdigital storytelling is not to use these NMLs to navigate all the obstacles resulting from the media collision, but to define the necessary competences, skills and literacies. The collision has already happened, and now we are asking ourselves what route needs to be taken.

Postdigital storytelling must make use of digital storytelling and transmedia storytelling to construct—or deconstruct. In essence, postdigital storytelling requires the notion of transmedia, as it allows it to work within the existing media ecosystem in a critical way. It does not have to be transmedia storytelling, since transmedia

storytelling necessarily requires a narrative that must be expanded and that generates a great commitment when designing proposals. Nor does it have to be eminently digital, as if it were digital storytelling or transmedia storytelling proposals.

In fact, a value that enhances the postdigital phenomenon is the hacker proposals, Do It Yourself and the maker paradigm (Cramer 2015; Gahoonia 2023), proposals where precisely the digital and analog domain is inverted, maintaining the essence of the maker culture of the 1960s and 1970s, eminently analog, but taking advantage of the potential of digital technologies. However, for transmedia and transmedia storytelling, these types of proposals are very similar, given the importance given to participatory culture and remixing within these proposals. Thus, the participatory culture and remixing of the transmedia proposal remain in the postdigital era, but the forms of participation and collective construction change.

They evolve, as should the conceptualisation of New Media Literacies that should now consider other challenges, such as the six posed by Selwyn et al. (2019) when imagining the future of EdTech, and to which we can add data literacy (Castañeda et al. 2024; Pangrazio and Sefton-Green 2020), critical data literacy (Pangrazio and Selwyn 2021) or literacy in artificial intelligences, among others. However, they should not only focus on the digital context, and there will always be emerging technological challenges to address.

In reference to artificial intelligence, it is pertinent to highlight the horizon of possibilities that they can offer in the construction and expansion of storytelling, beyond the uses that are being identified educationally (Chiu et al. 2023). For example, they can build visually in the construction of the story with platforms for generating images through text, such as DALL-E; in their expansion of the story using large language models such as ChatGPT; or the expansion to other platforms, with the use of tools for the transformation of content to other formats like podcasts.

In short, we learn transmediatically, but it seems that transmedia in the field of education leads us towards a highly digitalised context, and in this context, not all literacies are considered. In this sense, whether using transmedia storytelling with a postdigital perspective, or postdigital storytelling, the confluence of postdigital and transmedia perspectives seems key to the creation of meaningful storytelling processes to enrich teaching and learning processes, achieving a critical and empowered citizenry to live and analyse and participate fully in today's society, but being able to acquire the tools to transform it.

Funding Open Access funding provided thanks to the CRUE-CSIC agreement with Springer Nature. This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Declarations

All authors agree with the content of the manuscript and with the order of the authorship and assure that the submission represents work of their own and is not under review elsewhere. The correspondence author ensures that they will take responsibility for informing co-authors of editorial revisions, reviews received and any changes or revisions made.

Competing Interests The authors declare no competing interests.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Albarello, F. J., & Mihal, I. (2018). Del canon al fandom escolar: #Orson80 como narrativa transmedia educativa. *Comunicación y Sociedad*, 33, 223–247. <https://doi.org/10.32870/cys.v0i33.7055>.
- Alper, M., & Herr-Stephenson, R. (2013). Transmedia Play: Literacy Across Media. *Journal of Media Literacy Education*, 5(2), 366–339. <https://doi.org/10.23860/jmle-5-2-2>.
- Berry, D. M., & Dieter, M. (2015). Thinking Postdigital Aesthetics: Art, Computation and Design. In D. M. Berry & M. Dieter (Eds.), *Postdigital Aesthetics. Art Computation And Design* (pp. 1–11). London: Palgrave Macmillan. https://doi.org/10.1057/9781137437204_1.
- Bhatt, I. (2023). Postdigital Literacies. In P. Jandrić (Ed.), *The Encyclopedia of Postdigital Science and Education*. Cham: Springer. https://doi.org/10.1007/978-3-031-35469-4_15-1.
- Bruner, J. (1986). *Actual Minds, Possible Worlds*. Cambridge, MA and London, England: Harvard University Press. <https://doi.org/10.4159/9780674029019>.
- Bruns, A. (2008). *Blogs, Wikipedia, Second Life, and Beyond: From Production to Prodsage*. New York: Peter Lang.
- Buckingham, D. (2003). *Media education: Literacy, learning and contemporary culture*. Cambridge, UK: Polity.
- Buckingham, D. (2020). Rethinking digital literacy: Media education in the age of digital capitalism. *Digital Education Review*, 37, 230–239. <https://doi.org/10.1344/der.2020.37.230-239>.
- Campbell, C., & Olteanu, A. (2023). The Challenge of Postdigital Literacy: Extending Multimodality and Social Semiotics for a New Age. *Postdigital Science and Education*. <https://doi.org/10.1007/s42438-023-00414-8>.
- Cascone, K. (2000). The aesthetics of failure: 'Post-digital' tendencies in contemporary computer music. *Computer Music Journal*, 24(4), 12–18. <https://doi.org/10.1162/01489260059489>.
- Castañeda, L., Haba-Ortuño, I., Villar-Onrubia, D., Marín, V. I. ., Tur, G., Ruipérez-Valiente, J. A., & Wasson, B. (2024). Developing the DALI Data Literacy Framework for critical citizenry. *Revista Iberoamericana De Educación a Distancia*, 27(1), 289–318. <https://doi.org/10.5944/ried.27.1.37773>.
- Chan, B. S. K., Churchill, D., & Chiu, T. K. F. (2017). Digital Literacy Learning In Higher Education Through Digital Storytelling Approach. *Journal of International Education Research (JIER)*, 13(1), 1–16. <https://doi.org/10.19030/jier.v13i1.9907>.
- Chiu, T. K. F., Xia, Q., Zhou, X., Chai, C. S., & Cheng, M. (2023). Systematic literature review on opportunities, challenges, and future research recommendations of artificial intelligence in education. *Computer & Education: Artificial Intelligence*, 4, 100118. <https://doi.org/10.1016/j.caeai.2022.100118>.
- Cramer, F. (2015). What is 'post-digital'? In D. M. Berry & M. Dieter (Eds.), *Postdigital aesthetics: Art, computation and design* (pp. 12–26). London: Palgrave Macmillan. https://doi.org/10.1057/9781137437204_2.
- Cramer, F., & Jandrić, P. (2021). Postdigital: A Term That Sucks but Is Useful. *Postdigital Science and Education*, 3(3), 966–989. <https://doi.org/10.1007/s42438-021-00225-9>.
- Dalby, J. (2021). Holarchic Media: When transmedia just isn't Transmedia enough. *Academia Letters*, 2210. <https://doi.org/10.20935/AL2210>.
- Dena, C. (2009). *Transmedia Practice: Theorising the Practice of Expressing a Fictional World*. [Doctoral Thesis]. Sydney: University of Sydney, International Center for Transdisciplinary Research. <https://bit.ly/3SrInJM>. Accessed 9 May 2024.

- Dickinson-Delaporte, S., Gunness, A., & McNair, H. (2020). Engaging Higher Education Learners With Transmedia Play. *Journal of Marketing Education*, 42(2), 123–133. <https://doi.org/10.1177/0273475318775138>.
- Eagan, K. (1986). *Teaching as Storytelling: An Alternative Approach to Teaching and Curriculum in the Elementary School*. Chicago, IL: University of Chicago Press.
- Farag, A., Greeley, L., & Swindell, A. (2020). Freire 2.0: Pedagogy of the digitally oppressed. *Educational Philosophy and Theory*, 54(13), 2214–2227. <https://doi.org/10.1080/00131857.2021.2010541>.
- Fawns, T. (2019). Postdigital education in design and practice. *Postdigital Science and Education*, 1(1), 132–145. <https://doi.org/10.1007/s42438-018-0021-8>.
- Ferrés, J., & Masanet, M. (2017). La eficacia comunicativa en la educación: Potenciando las emociones y el relato [Communication efficiency in education: Increasing emotions and storytelling]. *Comunicar*, 52, 51–60. <https://doi.org/10.3916/CS2-2017-05>.
- Freire, M. M. (2020). Transmedia Storytelling: from Convergence to Transliteracy. *DELTA*, 36(3), 1–22. <https://doi.org/10.1590/1678-460X2020360309>.
- Gahoonia, S. K. (2023). Makers, Not Users: Inscriptions of Design in the Development of Postdigital Technology Education. *Postdigital Science and Education*. <https://doi.org/10.1007/s42438-023-00431-7>.
- González-Martínez, J., Esteban-Guitart, M., Rostan-Sanchez, C., Serrat-Sellabona, E., & Estebanell-Minguell, M. (2019). What's up with transmedia and education? A literature review. *Digital Education Review*, 36, 207–222. <https://doi.org/10.1344/der.2019.36.207-222>.
- Hayes, S. (2019). *The labour of words in higher education: Is it time to reoccupy policy?* Leiden: Brill.
- Jandrić, P., & Ford, D. (2022). Postdigital Ecopedagogies: Genealogies, Contradictions, and Possible Futures. *Postdigital Science and Education*, 4(3), 672–710. <https://doi.org/10.1007/s42438-020-00207-3>.
- Jandrić, P., & Hayes, S. (2020). Postdigital We-Learn. *Studies in Philosophy of Education*, 39(3), 285–297. <https://doi.org/10.1007/s11217-020-09711-2>.
- Jandrić, P., Knox, J., Besley, T., Ryberg, T., Suoranta, J., & Hayes, S. (2018). Postdigital science and education. *Educational Philosophy and Theory*, 50(10), 893–899. <https://doi.org/10.1080/00131857.2018.1454000>.
- Jenkins, H. (2006). *Convergence Culture: Where Old and New Media Collide*. New York: New York University Press.
- Jenkins, H., Ito, M., & boyd, d. (2015). *Participatory culture in a networked era: A conversation on youth, learning, commerce, and politics*. Cambridge, CA: Polity Press.
- Jenkins, H. (2001). Convergence? I Diverge. MIT Technology Review, 1 June. <https://www.technologyreview.com/2001/06/01/235791/convergence-i-diverge/>. Accessed 31 October 2023.
- Jenkins, H. (2003). Transmedia storytelling. MIT Technology Review, 15 January. <https://www.technologyreview.com/2003/01/15/234540/transmedia-storytelling/>. Accessed 31 October 2023.
- Jenkins, H. (2007). Transmedia 101. Pop Junctions, 21 March. http://henryjenkins.org/blog/2007/03/transmedia_storytelling_101.html. Accessed 31 October 2023.
- Jenkins, H. (2011). Transmedia 202: Further Reflections. Pop Junctions, 31 July. http://henryjenkins.org/2011/08/defining_transmedia_further_re.html. Accessed 31 October 2023.
- Jenkins, H. (2017). Transmedia Logics and Locations. In B. W. L. Derhy Kurtz & M. Bourdaa (Eds.), *The Rise of Transtexts: Challenges and Opportunities* (pp. 220–240). Abingdon: Routledge.
- Jenkins, H., Purushotma, R., Weigel, M., Clinton, K., & Robison, A. J. (2009). *Confronting the Challenges of Participatory Culture. Media Education for the 21st Century*. Cambridge, MA and London, UK: The MIT Press. <https://doi.org/10.7551/mitpress/8435.001.0001>.
- Jordan, S. (2019). *Postdigital storytelling: poetics, praxis, research*. New York: Routledge. <https://doi.org/10.4324/9781315112251>.
- Kalogeras, S. (2021). Transmedia Storytelling Edutainment and the New Testament Lesson. In L. C. Mihaes, R. Andreescu, & A. Dimitriu (Eds.) *Handbook of Research on Contemporary Storytelling Methods Across New Media and Disciplines* (pp. 392–406). Hershey, PA: IGI Global. <https://doi.org/10.4018/978-1-7998-6605-3.ch020>.
- Kim, D., & Li, M. (2021). Digital storytelling: facilitating learning and identity development. *Journal of Computers in Education*, 8, 33–61. <https://doi.org/10.1007/s40692-020-00170-9>.
- Kinder, M. (1991). *Playing with Power in Movies, Television, and Video Games: From Muppet babies to Teenage Mutant Ninja Turtles*. Berkeley, CA: University of California Press.

- Knox, J. (2019). What Does the 'Postdigital' Mean for Education? Three Critical Perspectives on the Digital, with Implications for Educational Research and Practice. *Postdigital Science and Education*, 1(2), 357–370. <https://doi.org/10.1007/s42438-019-00045-y>.
- LaFrance, J., & Blizzard, J. (2013). Student perceptions of digital storytelling as a learning-tool for educational leaders. *International Journal of Educational Leadership Preparation*, 8(2), 25–43.
- Lambert, J. (2013). *Digital Storytelling: Capturing lives, Creating Community*. 4th Ed. New York: Routledge. <https://doi.org/10.4324/9780203102329>.
- Lambert, J., & Hessler, B. (2018). *Digital Storytelling: Capturing Lives, Creating Community*. New York: Routledge. <https://doi.org/10.4324/9781351266369>.
- Lang, B., Dolan, R., Kemper, J., & Northey, G. (2020). Prosumers in times of crisis: definition, archetypes and implications. *Journal of Service Management*, 32(2), 176–189. <https://doi.org/10.1108/JOSM-05-2020-0155>.
- Lemke, J. (2009). Multimodal genres and transmedia traversals: Social semiotics and the political economy of the sign. *Semiotica*, 173, 283–297. <https://doi.org/10.1515/SEMI.2009.012>.
- Lévy, P. (1999). *Collective intelligence: Mankind's emerging world in cyberspace*. Cambridge, MA: Perseus Publishing.
- Mesquita-Romero, W., Fernández-Morante, C., & Cebreiro-López, B. (2022). Alfabetización mediática crítica para mejorar la competencia del alumnado [Critical media literacy to improve students' competencies]. *Comunicar*, 70, 47–57. <https://doi.org/10.3916/C70-2022-04>.
- Meyerhofer-Parra, R., & González-Martínez, J. (2023a). So, What do we Talk About When we Talk About Transmedia Storytelling in Education? A Systematic Literature Review. [Unpublished Work]. Girona: University of Girona, Department of Pedagogy.
- Meyerhofer-Parra, R., & González-Martínez, J. (2023b). 'Transmedia contenttelling': l'ús d'experiències transmedia amb absència d'storytelling en l'àmbit educatiu ['Transmedia contenttelling': the use of transmedia experiences in the absence of storytelling in the educational environment]. *Temps D'educació*, 64, 83–100. <https://doi.org/10.1344/TempsEducacio2023.64.6>.
- Meyerhofer-Parra, R., & González-Martínez, J. (2023c). Transmedia? Storytelling? A Systematic Literature Review of its Practices in the Educational Field. [Unpublished Work]. Girona: University of Girona, Department of Pedagogy.
- Molas-Castells, N., & Rodríguez-Illera, J. L. (2018). Activity and learning contexts in educational transmedia. *Digital Education Review*, 33, 77–86. <https://doi.org/10.1344/der.2018.33.77-86>.
- Morozov, E. (2014). *To Save Everything, Click Here: The Folly of Technological Solutionism*. New York: PublicAffairs.
- Nagy, P., Mawasi, A., Eustice, K., Cook-Davis, A., Finn, E., & Wylie, R. (2022). Increasing learners' self-efficacy beliefs and curiosity through a Frankenstein-themed transmedia storytelling experience. *British Journal of Educational Technology*, 53, 1626–1644. <https://doi.org/10.1111/bjet.13202>.
- Pangrazio, L., & Sefton-Green, J. (2020). The social utility of 'data literacy'. *Learning, Media and Technology*, 45(2), 208–220. <https://doi.org/10.1080/17439884.2020.1707223>.
- Pangrazio, L., & Selwyn, N. (2021). Towards a school-based 'critical data education'. *Pedagogy, Culture & Society*, 29(3), 431–448. <https://doi.org/10.1080/14681366.2020.1747527>.
- Peracaula-Bosch, M., & González-Martínez, J. (2023). Towards a Hermeneutics of Computational Thinking in Wing's Approximations. *Journal of Educational Computing Research*. <https://doi.org/10.1177/07356331231193142>.
- Rahm, L. (2023). Educational imaginaries: governance at the intersection of Technology and education. *Journal of Education Policy*, 38(1), 46–68. <https://doi.org/10.1080/02680939.2021.1970233>.
- Reilly, E. (2013). Visualization as a New Media Literacy. In B. S. De Abreu & P. Mihailidis (Eds.), *Media Literacy Education in Action: Theoretical and Pedagogical Perspectives* (pp. 45–51). New York: Routledge. <https://doi.org/10.4324/9780203076125>.
- Sanchez-Mesa, D., Aarseth, E., Pratten, R., & Scolari, C. A. (2016). Transmedia (Storytelling?): A polyphonic critical review. *Arnodes*, 18, 8–19. <https://doi.org/10.7238/a.v0i18.3064>.
- Scolari, C. A. (2009). Transmedia Storytelling: Implicit Consumers, Narrative Worlds, and Brading in Contemporary Media Production. *International Journal of Communication*, 3, 586–606.
- Scolari, C. A. (2010). Convergencia, medios y educación [Convergence, media and education]. In Proceedings of *Convergencia de medios: nuevos desafíos para la educación en Latinoamérica* (pp. 1–56). Buenos Aires: RELPE. <http://bit.ly/3Zo9qr2>. Accessed 9 May 2024.
- Scolari, C. A. (2012). Media Ecology: Exploring the Metaphor to Expand the Theory. *Communication Theory*, 22(2), 204–225. <https://doi.org/10.1111/j.1468-2885.2012.01404.x>.

- Scolari, C. A. (2013). *Narrativas transmedia: Cuando todos los medios cuentan* [Transmedia Storytelling: When all media matter]. Barcelona: Deusto.
- Scolari, C. A. (2018). *Adolescentes, medios de comunicación y culturas colaborativas: aprovechando las competencias transmedia de los jóvenes en el aula* [Adolescents, media and collaborative cultures: using young people's transmedia skills in the classroom]. Barcelona: Universitat Pompeu Fabra. <https://bit.ly/3ku7tuF>. Accessed 9 May 2024.
- Scolari, C. A., Rodríguez, N. L., & Masanet, M. J. (2019). Educación Transmedia. De los contenidos generados por los usuarios a los contenidos generados por los estudiantes [Transmedia Education. From user-generated content to student-generated content]. *Revista Latina de Comunicación Social*, 74, 116–132. <https://doi.org/10.4185/RLCS-2019-1324>.
- Selwyn, N., Hillman, T., Eynon, R., Ferreira, G., Knox, J., Macgilchrist, F., & Sancho-Gil, J.M. (2019). What's next for Ed-Tech? Critical hopes and concerns for the 2020s. *Learning, Media and Technology*, 45(1), 1–6. <https://doi.org/10.1080/17439884.2020.1694945>.
- Toffler, A. (1980). *The Third Wave: The classic study of tomorrow*. New York: Bantam.
- Van Dijk, J. A. G. M. (2017). Digital Divide: Impact of Access. In P. Rössler, C. A. Hoffner, & L. van Zoonen (Eds.), *The International Encyclopedia of Media Effects*. John Wiley & Sons. <https://doi.org/10.1002/9781118783764.wbieme0043>.
- Wiklund-Engblom, A., Hiltunen, K., Hartvik, J., & Porko-Hudd, M. (2013). Transmedia Storybuilding in Sloyd. In IADIS Mobile Learning 2013 International Conference, Lisbon. <https://doi.org/10.13140/2.1.3856.4803>.
- Wu, J., & Chen, D.-T. V. (2020). A systematic review of educational digital storytelling. *Computers & Education*, 147, 103786. <https://doi.org/10.1016/j.compedu.2019.103786>.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.