Children’s rights and digital technologies: Introduction to the discourse and some meta-observations

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Accessibility
Children’s Rights and Digital Technologies:
Introduction to the Discourse and Some Meta-Observations

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Digital technology plays an important role in the lives of a rapidly growing number of children around the globe. The increased access to and use of digital technologies is associated with a diverse set of risks and opportunities, which in turn interact in important ways with children’s protection, provision, and participation rights. This chapter seeks to provide an introduction to the relatively nascent, but quickly evolving children’s digital rights discourse, and aims to serve as a navigation aid. It starts with an overview of children’s engagement with digital technology, then discusses key perspectives, issues, arenas, and actors, and finally offers a series of meta-observations for further exploration and discussion.

Introduction

In many parts of the world, the emergence and spread of digital technologies, particularly the Internet, has led to an increasingly robust public debate about the opportunities and challenges associated with the use of digital technologies. From a legal and policy perspective, the debates cover a diverse set of issues, ranging from questions related to infrastructure and access to issues such as intellectual property and quality of information, and take place in various forums at the national, regional, as well as global levels, and engage many different stakeholders. Across these debates, the impact of digital technology on children has become a particular area of concern, given both children’s widespread adoption of digital technologies and their potential vulnerability in the light of their state of development, among other factors (Livingstone, Carr, & Byrne, 2015a).

Initially, a strong emphasis of the public discussion about children and digital technology was on measuring and understanding tech-facilitated risks and potential harms related to child safety, online privacy, aggression, information overload, and addiction; this perspective was later supplemented by a discussion of the opportunities associated with children’s use of digital technology (Palfrey & Gasser, 2008). More recently, the previously predominately risk-oriented and issues-driven policy conversation has turned into a more holistic debate about the challenges and opportunities of digital technologies for children and their interests.

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1 In accordance with the UN Convention on the Rights of the Child, we use the term children to refer to all legal minors—generally, that is human beings below the age of eighteen years.
2 According to Livingstone, Carr, and Byrne (2015a), “an estimated one in three of all Internet users in the world today is below the age of 18” (p. 1).
It is in this context in which the idea of children’s rights for the digital age is examined. Despite important initial work (Livingstone & Haddon, 2011; Livingstone & Bulger, 2013; Livingstone & O’Neill, 2014; Livingstone et al., 2015a; Staksrud, 2013; Third, Bellerose, Dawkins, Keltie, & Pihl, 2014), this discourse is still in its infancy and currently dispersed across different forums and communities.

This chapter, written from a law and policy perspective as informed by interdisciplinary research, seeks to provide an introduction to the current debate about children’s rights in the digital age. It starts with a brief overview of children’s engagement with digital technology, which is foundational for the understanding of what we might call the evolving children’s digital rights discourse. The article then offers, in the spirit of a navigation aid, an overview of perspectives, issues, and key arenas, as well as actors, which constitute the children’s digital rights discourse. Building upon selected examples that illustrate the thematic breadth of the debate, the chapter concludes with a series of cross-sectional meta-observations for further exploration and discussion.

**Children’s Engagement with Digital Technology**

The discussion about children’s rights in the digital age is motivated by the enhanced role that digital technologies play in children’s everyday lives. While the availability of statistics on

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3 While the contours of what constitutes children’s rights have become clearer over the past decades (Franklin, p. 19), there is no single accepted definition or theory of the rights held by children available (Mangold, 2002, p. 75). These conceptual and definitional problems carry over when examining the interplay between digital technologies and children’s rights. For the purpose of this chapter, we propose a frame that takes into account different schools of thought and perspectives, and embraces a diverse set of activities and arguments related to children’s rights in the digital age. We introduce the term *children’s digital rights discourse* as a shortcut for such a frame, which includes a diverse set of issues at the intersection of children’s lives, digital technology, and the law.
children’s access and usage is limited, and data that is available is rarely truly representative of all children in a particular country or community, changes quickly, and is typically biased towards the Global North, the indicators in the textbox below might at least give an approximation of the role digital technology plays in children’s lives.

• Many children in the Global North have access to the Internet. For example, 92%\textsuperscript{i} of children in the U.S. go online daily and 99%\textsuperscript{ii} of children in Canada are able to access the Internet outside of school. Also, 88%\textsuperscript{iii} of children in the U.K. and 99%\textsuperscript{iv} of children in Switzerland have Internet access at home. However in the Global South, many children remain less connected. For instance, 90%\textsuperscript{v} of children in Brazil access the Internet at least once or twice a week. Furthermore, only 77.8%\textsuperscript{vi} of children in Colombia, 42.3%\textsuperscript{vii} of children in El Salvador, 14.2%\textsuperscript{viii} of children Malaysia, and 11.8%\textsuperscript{ix} of children in Bangladesh are connected to the Internet.

• More often now, children either own or have access to mobile phones and smartphones that they use to go online. For example, 98%\textsuperscript{x} of Swiss children, and 58%\textsuperscript{xi} of boys and 60%\textsuperscript{xii} of girls in Canada own a mobile phone. 73%\textsuperscript{xiii} of all children in the U.S. have access to a smartphone. Furthermore, 82%\textsuperscript{xiv} of children in Brazil use phones to access the Internet, and 56%\textsuperscript{xv} of children in the U.K. use smartphones to go online daily.

• Social media platforms – particularly Facebook and YouTube – have become popular among children. 81%\textsuperscript{xvi} of children in the U.S. use some kind of social media. In Switzerland, 79%\textsuperscript{xvii} of children use YouTube several times a week and 65%\textsuperscript{xviii} of children spend time on social networks several times a week. Also, 78%\textsuperscript{xix} of children in Brazil, and 58%\textsuperscript{xx} of children in the U.K. report having profiles on at least one social networking site.
• The Internet has become the key medium for gathering information. 84% of children in the U.S., 78% of children in Canada, and 17.1% of children in Kenya use the Internet to search for information related to their health. Furthermore, 73% of children in the U.S., 85% of children in the E.U., 68% of children in Brazil, and 21.1% of children in Kenya use computers and the Internet for schoolwork.

• Some children also use the Internet to play games. 56% of U.S. children, 80.1% of Malaysian children, and 63.8% of Kenyan children spend time gaming. Additionally, 28% of E.U. children and 45% of Brazilian children played games with other people online.

• A smaller number of children utilize online platforms and/or digital means to become involved in political discourse. For instance, 41% of U.S. children engage online in acts of participatory politics. For 22.5% of Malaysian children “politics” is one of the main motivations for using Facebook. In the U.K., 12% of children sometimes express their views online about political or social issues.

• Not all content children encounter online is good. 78% of Canadian children report that they have come across racist or sexist content online. Moreover, in the U.K., 20% of children have been exposed to hate messages, 13% to pro-anorexia sites, and 11% to self-harm sites. Children in Brazil have reported very similar numbers.

Among the perhaps most impressive indicators that illustrate the role of digital technology in children’s lives is the exponential increase in their access to and ownership of digital devices such as phones, laptops, and tablets, among others (Barbosa, 2014; Lenhart, Smith, Anderson, Duggan, & Perrin, 2015a; Porter et al., 2016)—propelled by the advent of the smartphone and
the emergence of mobile apps (Lenhart et al., 2015a; Livingstone, Haddon, Görzig, & Olafsson, 2011; Madden, Lenhart, Cortesi, & Gasser, 2013; Mascheroni & Cuman, 2014). That said, it is important to acknowledge that a great disparity persists in children’s access to digital technologies around the world and across demographics. Particularly children in the Global South as well as children in vulnerable and marginalized communities are often excluded from leveraging the benefits offered by the digital world (Gasser & Cortesi, 2015; Kleine, Hollow, & Poveda, 2014).

The widespread adoption of digital devices, which allow children to connect with the Internet, goes hand in hand with a growing number of social media and other digital services that have become available to children. Such applications include social media platforms (e.g., Facebook, Twitter, and Instagram); video-sharing sites (e.g., YouTube, Vine); messaging applications (e.g., Snapchat and WhatsApp); online blogs (e.g., Tumblr); music-sharing sites (e.g., Spotify and Pandora); and video games (e.g., Angry Birds, Halo). Despite the relative popularity of some platforms and services, recent data suggests that children simultaneously use similar platforms and applications for distinct purposes (Cortesi, 2013; Lenhart et al., 2015a; Madden et al., 2013), providing them with a wide-ranging variety of options to explore specific aspects of their creative expressions and share them with peers.

From a children’s rights perspective, even more relevant than the number and diversity of digital devices, platforms, and services available to children are the implications of the use of these technologies. A growing body of evidence demonstrates how digital technologies are impacting (or at least have the potential to impact) children’s lives around the world in both
positive and negative ways. The following examples might be helpful to illustrate the relevance of digital technologies when it comes to children’s rights and rights-related issues.

Positive Experiences

The Internet has become one of children’s preferred sources of information. Through the Internet, children are able to access a variety of information, ranging from health topics and current events to college admissions literature and employment opportunities (Barbosa, 2014; Cortesi & Gasser, 2015; Dobransky & Hargittai, 2012; Wartella, Rideout, Zupancic, Beaudoin-Ryan, & Lauricella, 2015). This information stems from a variety of online sources, including encyclopedias, social media, news outlets, MOOCs, videos, and podcasts among others (Purcell et al., 2012). Just as the type and location of the information sought by children vary, so do the purposes. While some intentions can be more self-motivated, such as desires to confirm facts children encounter both online and offline, others might be more exogenously motivated, such as fact-finding in order to complete homework assignments (Barbosa, 2014; Rideout, 2015; Steeves, 2014; Third et al., 2014).

An important use of information children access online is in an educational context. Around the world, growing numbers of schools are utilizing digital media in learning and are employing connected learning methods (Buckingham, 2007; Ito et al., 2013; Olafsson, Livingstone, & Haddon, 2014). Taking these new forms of learning into account, different stakeholders (e.g., governments, NGOs, foundations, and technology companies) are providing students and schools with tablets and computers and are improving the infrastructures of informal learning spaces, such as libraries and other community-based spaces. Such improved
informal learning spaces may not only offer children better access to digital technologies and the
Internet, but may also play a key role in helping children find supportive networks of peers and
mentors, while also learning new digital skills (Gasser & Cortesi, 2015; Ito et al., 2010; Jenkins,
Ito, & boyd, 2015; Palfrey, 2015).

Digital technologies also play a central role in many children’s lives when it comes to
recreation and leisure. Online games, for instance, are particularly popular among children. A
majority of children play games that include diverse genres, ranging from puzzles to first-person
shooter games, and educational games (Rideout, 2015; EU Kids Online, 2014; Lenhart et al.,
2008; UNICEF, 2013). Through playing games such as Minecraft and Scratch, children can
acquire useful skills, including the ability to think creatively, and develop self-regulation,
collaboration, and problem-solving skills (Junco, 2014; Roque, 2014; Roque, Rusk, & Blanton,
2013). As they spend more time gaming, children can also improve their digital skills, and gain
more confidence in using the Internet, which in part allows them to climb the “ladder of
opportunities” (O’Neill, Livingstone, & McLaughlin, 2011). These opportunities can extend to
things such as innovation, entrepreneurship, civic engagement, and more.

While the Internet is useful for gaining new information and having fun, it has also
become a vital means for children to connect and engage with other people. Social media
platforms, video games, and mobile phones play a crucial role in how children meet and interact
with friends. In many parts of the world, online platforms have become among the top places
where children hang out with close friends. Social media environments in particular are
environments where children’s friendships are strengthened and challenged (Lenhart, Smith, Anderson, Duggan, & Perrin, 2015b; Popovac, 2012).

In addition, many children use digital technologies to create and share content online. Children, for instance, post pictures and videos and share status updates with their friends. A smaller subset writes longer entries, produces code, engages in film-making, podcasting, or making types of creative multimedia content and digital art (Barbosa, 2014; Rideout, 2015; Rideout, Foehr, & Roberts, 2010). These various forms of content creation provide new opportunities for children to express themselves, make their voices heard, and to play a more active role in their communities (Cohen & Kahne, 2012; Shakuntala & Buckingham, 2013). These new types of enhanced participation may translate into civic engagement and various forms of political participation.

Negative Experiences

From the perspective of children’s rights, the negative experiences associated with the use of digital technologies are as important as the positive forms of engagement describe above. Some of the well-researched risks that have a clear connection to children’s (protection) rights are the receiving of inappropriate content, interactions between adults and children (e.g. harassment and grooming), and interactions initiated by children themselves (e.g., bullying and sexting) (Barbosa, 2014; Lenhart et al., 2011; Livingstone, Mascheroni, & Staksrud, 2015b).

Three types of risks that have children’s rights implications can be distinguished in accordance with one particularly influential online risks classification scheme developed in the
context of the EU Kids Online project: children’s content, conduct, and contact risks (Livingstone et al., 2015b). Consider the following examples.

- **Content:** With the increased popularity of social media and video sharing platforms, children not only come across inspiring content, but may also be confronted with violent, sexual explicit, racist, or hateful content that they may find disturbing. Only a minority of children report having seen sexual content online, but those who have encountered such content find the experience upsetting to some degree (Livingstone, Kirwil, Ponte, & Staksrud, 2013; Tsaliki, Chronaki, & Olafsson, 2014). Other types of online material that children may find upsetting include violent videos and games, rude and insensitive comments, and scary pop-up advertisements, all of which can reduce children’s enjoyment of the online experience (Livingstone et al., 2013; UK Council for Child Internet Safety, 2013).

- **Contact:** Apart from the potential of children encountering unpleasant content online, there is also the risk of unwanted and unsolicited contact by adults. Older research suggests that few children report having experienced an online sexual solicitation (Ospina, Harstall, & Dennett, 2010; Whittle, Hamilton-Giachritsis, Beech, & Collings, 2013; Wolak, Mitchell, & Finkelhor, 2006) but those who were exposed to grooming⁴ may experience severe negative consequences (European Union, 2013; Livingstone et al., 2013).

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⁴ The U.S. Department of Justice, NSOPW, defines grooming as “a method of building trust with a child and adults around the child in an effort to gain access to and time alone with her/him.” The Council of Europe defines grooming as “solicitation of children for sexual purposes.” For more information see also: Ospina, Harstall, & Dennet, 2010.
Conduct: While a majority of social media-using children observe mostly kind behavior online (Lenhart et al., 2011), various studies have shown different prevalence rates of cyberbullying (Levy et al., 2012; Livingstone et al., 2011; Livingstone et al., 2013). Sexting is another well-researched conduct risk with rights implications (Livingstone et al., 2011; Mitchell, Finkelhor, Jones, & Wolak, 2012). Only a very small number of children report having sent or received sexts (Lenhart, 2009; Livingstone et al., 2011), but some children feel bothered or pressured by others who ask them to send sexts (Ringrose, Gill, Livingstone, & Harvey, 2012; Temple et al., 2012). Engaging in sexting can have severe negative consequences (boyd, 2011), including legal ramifications that children might not be aware of (Schrock & boyd, 2011; Strohmaier, Murphy, & DeMatteo, 2014).

The examples provided in the previous paragraphs demonstrate the increasingly important role that digital technologies plays in the lives of many children. The section also indicates the various positive and negative experiences children might encounter in the digitally networked environment, with potential implications for children’s rights, broadly conceived. Against this more factual background, the next section takes a closer look at the emerging discourse about children’s rights in the digital age.

Mapping the Children’s Digital Rights Discourse

The observations about children’s access to and use of digital technologies in the previous section and the highlighted challenges and opportunities already indicate the heterogeneity of the children’s digital rights discourse from a phenomenological perspective.
From an analytical perspective, a comprehensive mapping and evaluation of the implications of digital technologies vis-à-vis children’s rights is further complicated by the fact that children’s lives “are underpinned by an incoherent hotchpotch of legal principles and government policies” (Fortin, 2009, p. 3). Instead of aiming for a comprehensive map, it might be helpful to introduce three complementary lenses through which the children’s digital rights discourse can be viewed and organized: Perspectives, issues, and arenas/actors.

**Perspectives**

Mirroring the children’s rights discourse more generally, the debate about the specific implications of digital technologies for children’s lives brings together a series of analytically distinct, albeit interrelated and sometimes overlapping perspectives. Borrowing from and expanding upon an earlier, pre-digital taxonomy (Franklin, 2002), the following perspectives might be highlighted:

- **From an intellectual perspective**, a growing number of scholars from various fields study the interaction between digital technology and social conceptions of childhood, children, and society in order to understand how a rights-framework should be conceptualized (Davies, Bhullar, & Dowty, 2011; Livingstone et al., 2015a; Livingstone & O’Neill, 2014). Ethnographic studies, focus group research, and surveys are useful methodological approaches to gain a deeper understanding of the ways in which children interact with digital technology (boyd, 2014; Gray, 2009; James, 2014; Livingstone & Haddon, 2011; Madden et al., 2013; Third et al., 2014) informing both theoretical and advocacy work focused on children’s rights.
From a *political perspective*, the impact of digital technologies on children has become the, often contested, subject of debates across party lines. Such debates often focus on risks associated with the use of the Internet, including violent information, child safety issues, and broader concerns about children’s well-being (Staksrud, 2013; UNESCO, 2015). But also opportunities, particularly regarding 21st century skill-building and the potential of digital technologies for education, are debated in various political fora, including national parliaments (Western Sydney University, 2014).

Mirroring the political debate, from a *legal perspective*, law- and policymakers at the national and regional level have entered debates about the ways in which children must be protected (Bartholet, 2011) in the light of the risks resulting from digital technologies (Palfrey, boyd, & Sacco, 2010). In addition to such paternalistic approaches, the question of the need for “updated” rights of children—including participation rights—in the light of the changing digital world in which they live has been debated in policy circles. Occasionally, even new rights have been proposed.

Both within the evolving legal framework, a broad range of existing institutions (*institutional perspective*) committed to children’s rights (e.g., [http://www.derechosdigitales.org](http://www.derechosdigitales.org); Global Kids Online; [www.voicesofyouth.org](http://www.voicesofyouth.org)) have added a digital agenda to their mission and work, indicating an increased awareness of digital technology in children’s lives (Pawelczyk & Singh, 2014). In addition, new organizations have been created—including, for instance, helplines (e.g., [www.icanhelpline.org](http://www.icanhelpline.org); [www.saferinternet.org.uk](http://www.saferinternet.org.uk); Safer Internet Centres)—to address some of the digital challenges faced by young people. In addition, a number of
institutions and initiatives have emerged to support children’s rights to participate, particularly as users of local government services such as scholars, libraries, educational institutions, etc. that increasingly embrace the potential digital technology offers.

Conversations about the implications of digital technology also take place at the international level (*international perspective*). For example, the Committee on the Rights of the Child devoted the Day of General Discussion—as part of the Committee’s 67th Session in September 2014—to digital media and children’s rights in order to gain a deeper understanding of the effects of children’s engagement with digital technology and develop rights-based response strategies to maximize opportunities while minimizing risks.

Additionally, scholars and practitioners (Gasser, 2014a; Kleine, 2016; Third et al., 2014) as well as NGOs (e.g., [http://www.voicesofyouth.org](http://www.voicesofyouth.org)) have advocated for an enhanced engagement of children in the discourse on digital rights and pointed out the need to include a *children’s perspective*. RErights.org—an initiative by the Young and Well Cooperative Research Center and Western Sydney University in partnership with Digitally Connected and UNICEF’s Voices of Youth—is a very recent example of how different stakeholders come together and invite children globally to explore and define their rights in a digital age, and then translate children’s views for decision makers.

When asked about their rights in the digital world, children highlight the right to access as a precondition to exercise many of their rights, according to a recent consultation among children from 16 countries (Third et al., 2014). The importance of access to digital technology is
amplified by children’s view of digital media as a crucial means to exercise their rights to information, education, and participation. At the same time, children express concerns about the ways in which participation in the digital environment might compromise their protection rights (Third et al., 2014).

**Issues**

The variety of perspectives on children’s interaction with digital technologies indicates the diversity of issues up for discussion when considering and the ramifications for children’s rights in the digital age. As noted previously, children’s rights are a relatively unstructured amalgam of diverse norms, policies, and principles at the national, regional, and global level, which makes it virtually impossible to identify and systematize the relevant issues comprehensively that emerge as more and more children transition from an analog to a digitally connected environment. That being said, tentative issue clusters can be formed, broadly speaking, based on either a phenomenological or normative approach.

A phenomenological approach takes as a starting point the growing (but heavily biased towards the Global North, see Livingstone & Bulger, 2014) body of knowledge about children’s access to and use of digital technologies, and arrives at children’s rights and rights-related issues from the bottom-up. One example where legal and policy aspects are examined in a larger societal and developmental context is the research conducted by the Youth and Media team at the Berkman Center for Internet & Society at Harvard University. Building upon the earlier work by John Palfrey and Urs Gasser, thematic areas include the role of digital technology in children’s identity formation and possible legal ramifications, issues related to safety and
information privacy, creative practices and freedom of expression, problems related to information quality and overload, and opportunities in the field of innovation, learning, and activism, to mention a few of the key areas.

For each of these clusters, the best available data is analyzed in order to identify challenges as well as opportunities, and to examine, from an ecosystem perspective, which type of (parental, educational, social, legal, etc.) intervention is best suited to empower children where possible and protect them as necessary. In this mode of exploration, legal and policy issues—including, but not limited to, children’s rights issues—emerge from the bottom-up and may reveal problems zones or opportunities that have yet to be addressed by law- and policymakers.

A normative approach uses a conceptually different, but complementary starting point by looking at existing frameworks and contrasting them with children’s access and usage practices related to digital technologies. Given the importance of the UN Convention on the Rights of the Child (UN General Assembly, 1989; Fortin, 2009), the CRC, is often used as a normative frame to identify the implications of digital technology for children’s rights. Sonia Livingstone and Brian O’Neill, for example, developed a helpful framework based on the provision, protection, and participation rights set forth in the CRC to map issues related to children’s use of digital technology, and to formulate Internet governance policies in the interest of children. According to their analysis, the following issues are particularly salient:

• **Protection rights**: Illegal content and activity on the Internet involving the sexual abuse of children (Art. 10 and Art. 34); trafficking and other forms of exploitations which are
mediated and even exacerbated by the mass use of the Internet (Art. 35 and Art. 36); initiatives aimed at protecting children from material injuries to child’s well-being (Art. 17e and Art. 18); right to be protected from arbitrary or unlawful interference with privacy or unlawful attacks on honor and reputation (Art. 16 and Art. 8).

- **Provision rights**: Appropriate online content for children from diverse sources to promote social and moral well-being (Art. 17); implications of children seeking recreation and leisure online (Art. 31); right to education in relation to the Internet (Art. 28); acquisition of digital skills that enable responsible life in a free society (Art. 29).

- **Participation rights**: Right to be consulted in all matters affecting them in accordance with the age and maturity of the child (Article 12); right to freedom of expression (Art. 13); right to freedom of thought, conscience, and religion (Art. 14); rights to freedom of association and to freedom of peaceful assembly (Art. 15).

While not all encompassing, the CRC provides a useful structure to map a diverse set of issues emerging from children’s interaction with digital technologies onto core clusters and link them back to the more conventional children’s rights discourse. Both phenomenological and normative approaches to issue mapping can be supplemented by key areas and actors involved in the children’s digital rights discourse.

*Arenas and Actors*
In addition to differentiating among perspectives, approaches, and issues involved, it might be helpful to distill a number of key arenas that are particularly relevant to the children’s digital rights discourse. We propose four such arenas: The general debate about the Internet governance and digital rights; specific child-focused efforts aimed at translating children’s rights into the digital age; the ramifications of digital technologies in the context of the implementation of children’s rights, and research on children’s digital rights. The following paragraphs briefly describe each arena and highlight some examples.

*Internet Governance and Digital Rights*

As already mentioned, the debate about children’s rights in the digital age does not take place in a vacuum. At the most basic level, it can be seen as part of a larger debate about the governance of Internet (Livingstone et al., 2015a), here understood as “the development and application by governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and programs that shape the evolution and use of the Internet” (Report of the WGIG, 2005).

Historically, provisions aimed at protecting children on the Internet from exposure to inappropriate content were among the first Internet-specific laws introduced at the *national* level. In the United States, for instance, the Communications Decency Act of 1996 attempted to regulate children’s exposure to Internet indecency (and obscenity), but was later overturned by the Supreme Court as unconstitutional in the light of First Amendment free speech rights. Over time, the emphasis shifted from content risks to certain types of contact risks, as a wave of anti-cyberbullying legislation illustrates (Hinduja & Patchin, 2015). In parallel, the protection of
children’s privacy in digital environments has gained broad attention by national law- and policymakers (Gasser, 2015).

The implications of digital technologies for children’s rights did not only come up at the national, but also at the global level and thematically expanded from questions related to risks and protection to opportunities and associated enabling and supporting rights (Livingstone et al., 2015a). An early case in point is the Tunis Commitment of November 2005 as part of the World Summit on the Information Society, which recognized the role of digital technologies “in the protection of children and in enhancing the development of children” and promised to “strengthen action to protect children from abuse and defend their rights in the context of ICTs,” emphasizing the best interest of the child as a primary consideration (ITU, 2005).

More generally, children’s digital rights are also recognized in the context of a growing number of Internet Bills of Rights aimed at articulating a set of political rights, governance norms, and limitations on the exercise of power in the digitally networked world (Gill, Redeker & Gasser, 2015). Several of these bills include children by using broad terms such as “a person” or “all people” or “every human”, etc., while others explicitly address children. The iRights Coalition document, for instance, is very explicitly directed toward children (http://irights.uk/the_irights/). In addition to protective rights, many of these bills also enlist participation rights and provision rights (Gill et al., 2015).

As the definition mentioned above indicates, traditional legal instruments are only one tool in the Internet governance kit. Following a more general trend of problem solving in
cyberspace (Weber, 2014), *self-regulation* in its different manifestations has played a prominent role when addressing children’s risks online, often based on the argument that this mode of regulation can better keep pace with rapid technological and behavioral change (Livingstone et al., 2011). An example in this category is INHOPE, a multi-stakeholder network of 51 hotlines in 45 countries worldwide, which was launched under the EU Safer Internet Programme and deals with illegal content online, committed to eliminating child sexual abuse from the Internet (Tropina & Callanan, 2015).

In parallel, the venues for different kind of *multi-stakeholder approaches* to the children’s digital rights, broadly understood, have multiplied over the years. The Internet Governance Forum (IGF), for instance, has become an increasingly important platform to discuss and develop best practices relevant to the children’s access to and use of digital technologies. At the IGF 2015, for instance, sessions were dedicated to child online protection through multi-stakeholder engagement, multistakeholder solutions for youth-produced sexual content, and mitigation of online hate speech and youth radicalization, to name just a few—in addition to discussions as to what extent young people themselves should be part of Internet governance ([http://igf2015.intgovforum.org/](http://igf2015.intgovforum.org/)).

*Child-Focused Frameworks and Strategies*

As the previous paragraphs demonstrate, the list of issues emerging from digital technologies that are relevant from a children’s right perspective is long and diverse and includes both risks and opportunities. In addition to the patchwork of laws, policies, and practices that have emerged over the past two decades, more *comprehensive frameworks and strategies* aimed
at dealing with the digital implications for children’s rights have been proposed, examined and, in some instances, established.

At the global level, it is particularly noteworthy that the Committee on the Rights of the Child devoted the Day of General Discussion as part of the Committee’s 67th Session in September 2014 to “Digital media and children’s rights”. The goal of the discussion was “to better understand the effects of children’s engagement with social media as well as information and communication technologies (ICT), in order to understand the impact on and role of children’s rights in this area, and develop rights-based strategies to maximize the online opportunities for children while protecting them from risks and possible harm” (The Office of the United Nations High Commissioner for Human Rights, 2014).

Efforts to promote greater opportunities for young people online by stemming potential risks also take place at the regional level. The European Union, for instance, promulgated the “European Strategy for a Better Internet for Children” in 2008. This program, which is built upon the Safer Internet Program and which is administered through the EU’s “Connecting Europe” initiative, seeks to balance the opportunities and risks of the Internet for youth through a combination of implementing government oversight, improving digital and technological literacies, and encouraging youth and parents to work together for self-regulation. While the initial model focused more narrowly on specific risks, recent revisions are broader in scope in order to understand the impact of this multi-stakeholder European effort on child rights (Livingstone et. al., 2015b).
The OECD, to take another example of a strategic approach, proposed its own framework for mitigating online risk and empowering young people based upon the lessons of the EU’s approach and other efforts. While the OECD expressed concern over what it saw as the risks of youth Internet usage, the organization noted that any means of promoting greater safety online must also, “respect the rights of children and the freedom of Internet users” (OECD, 2012, p. 9).

Implementation of Strategies and Frameworks

In addition to the debates about children’s digital rights at the level of abstract norms and frameworks, it is important to consider the implementation of strategies and frameworks aimed at securing and promoting children’s rights in the digitally networked world.

There have been many efforts by various stakeholders to promote and enforce the principles laid out by the CRC (Thomas, 2011). Independent human rights institutions known as Children’s Commissioners or Ombudsmen, for instance, are regional and national offices that advocate for and protect the rights of children by ensuring that adequate policies and services for children are in place. Non-governmental organizations such as NGOs and other special-interest groups can also work with children, guardians, organizations, and the government to raise awareness and instigate change. Across these implementation efforts, the implications of digital technology for children’s rights have become a topic of interest. But digital technology also plays an important role as a communication tool when raising awareness about children’s rights by disseminating knowledge and encouraging children to exercise their rights online.
Organizations that promote digital literacy and digital citizenship are other interesting implementers. Several of them have developed curricula that empower youth to better navigate the Internet. For instance, the Good Play team based at the Harvard Graduate School of Education, in collaboration with Henry Jenkins and his Project New Media Literacies group, developed Our Space, a casebook of classroom activities related to digital ethics. MediaSmarts, a Canadian not-for-profit charitable organization for digital and media literacy created a curriculum to empower children and youth with the critical thinking skills to engage with media as active and informed digital citizens. Con Vos en la Web developed a helpful set of guides and curricula in Spanish on topics such as the importance of protecting personal data, privacy, Internet safety, social media, and online games. Other organizations encourage children to put these ideas into practice, such as RE rights, an online platform that engages children in a series of activities that ask them to use various digital tools and resources to express themselves and explore their rights in the digital age.

Research Areas

The digital child rights discourse is also shaped by various research efforts that occur at national, regional, and global levels as well as in translational contexts. These inquiries into how children interact with digital technologies provide a better understanding of how to conceptualize children’s rights and can, ultimately, translate into policy solutions that uphold these rights in digital contexts.

Studies on child Internet and digital technology usage have been conducted in individual countries around the world, including the United States. Within U.S. research, studies often
include a mix between quantitative and qualitative research methods. While quantitative methodologies are employed in reports like various Pew Internet & American Life publications (Lenhart et. al. 2015a) and Generation M2 (Rideout, Foehr, & Roberts, 2010) to generate descriptive statistics, other research efforts utilize a mix of quantitative and qualitative methodologies to delve further into the rationales behind children’s digital technology usage (Rideout, 2015; Madden et. al., 2013). Through the combination of these two approaches, there is an increasingly complete body of knowledge for understanding children’s rights in a digital context within the countries in which these national studies occur.

In addition to national level inquiries, the last decade has been marked by the rise of studies examining child Internet and digital technology usage within regions. These studies, most prominently the EU Kids Online project (Livingstone & Haddon, 2011), allow for understanding the similarities and differences between children in different national contexts but within the same area of the world. Through regional research efforts, investigators are able to provide data to a wide array of policymakers in countries across the region. These regional level projects can provide important comparisons between regions to understand wider reaching usage trends.

In an effort to aggregate and analyze trends globally, some organizations have undertaken international level inquiries into how children use technology. While these organizations share the goal of identifying international trends that span regional boundaries, their approaches differ. Due to disparities in global data availability, some studies, like UNICEF Voices of Youth’s exploratory studies in the Ukraine (Beger, Hoveyda, & Sinha, 2011), Kenya (UNICEF, 2013), and Malaysia (UNICEF, 2014) seek to provide descriptive national data placed in an
international context. Conversely, other studies attempt to move beyond description to synthesize data from around the world to analyze international trends (Livingstone & Bulger 2013; Third et. al., 2014). Despite utilizing differing approaches, research is unique in that it provides information on the state of children’s interaction with digital technology across the globe, including the Global South.

Utilizing the findings of the three preceding research areas, some scholars have attempted to directly inform policy-making related to children’s rights in the digital age. Instead of conducting original research or describing and analyzing datasets alone, these translational research efforts, such as Dr. Tanya Byron’s report to the UK Department of Children, Schools, and Families (2008) and the Internet Safety Technical Task Force’s Multi-State Working Group report in the U.S. (Palfrey, boyd, & Sacco 2010), propose specific policies based upon research findings. Through these translational reports, researchers are able to build upon academic findings to inform and shape the children’s digital rights discourse, both at the national and international level.

**Meta-Observations**

The high-level overview of the children’s digital rights discourse at the intersection of children’s lives, digital technology, and the law—offered from a largely descriptive perspective—leads to a number of normative observations, which can be organized into general reflections on the discussion and more specific observations about the role of law as it interacts with the lives of children that are increasingly shaped by digital technologies.
General Observations

In terms of cross-sectional general observations, the children’s digital rights discourse is characterized by a high degree of heterogeneity. The previous sections have highlighted the diverse set of perspectives, issues, arenas, and actors associated with the topic. This heterogeneity is characteristic of contemporary debates about the impact of digital technologies on society more broadly and has several sources. As noted earlier, the notion of children’s rights as such lacks a precise definition and invites a plurality of perspectives. The thematic breath is also indicative of the manifold ways in which children’s lives and the law interact with each other. This complexity is amplified by the widespread adoption of digital technologies, which in turn shapes the lives of children in various ways, as the earlier section suggested, and also challenges existing legal norms in many respects (Palfrey & Gasser, 2008).

This leads to a second general observation: The highly dynamic nature of the conversation about children’s digital rights. Located at the intersection of children’s lives, digital technologies, and law, the discourse mirrors the rapidly changing landscape of digital technology as well as adaptive user behavior, which we can observe particularly among children (Cortesi, 2013). Simultaneously, the debate is exactly concerned with the question of if and as to what extent the legal system in general and children’s rights in particular need to be adjusted in the light of the challenges and opportunities mentioned before. Putting the three elements together, the children’s digital rights discourse is necessarily a moving target until the overall entropy decreases and the system reaches a new, semi-stable equilibrium.
The heterogeneity and inherent dynamism of the children’s digital rights discourse points towards a third observation, which might be labeled as the *methodological challenge*. To understand children’s access and use of quickly evolving digital technologies and consider the implications for children’s rights and children’s rights law requires a combination of disciplinary perspectives and associated methods, ranging from ethnographic know-how to legal expertise, to mention just two salient examples. This working together among disciplines and the pooling of knowledge is a necessity when considering law-based interventions to protect and empower children in an age of evidence-based law- and policymaking. But this interdisciplinarity also creates significant challenges. Participants in the children’s digital rights discourse who have a social science background, for instance, often use a different vocabulary than contributors with a legal background, and vice versa. Given the relatively nascent status of the debate about children’s rights in the digital age, interfaces that can “translate” among the disciplinary language on the one hand, and research and law-making on the other hand, have not fully developed yet (Gasser, 2014b).

**Specific Observations**

Focusing on the legal system as the third component in the triangle of children’s lives, digital technologies, and the law, the following three specific observations deserve to be highlighted based on the broader overview of the children’s digital rights discourse in the previous section.
First, it might be helpful to look at the conversation about children’s rights in the digital age through the more general lens of information law to better understand how digital technology and its ramifications interact with the law. From such a perspective, certain response patterns can be observed when it comes to the evolution of legal norms vis-à-vis technological change (Gasser & Burkert, 2007)—patterns that also might be helpful when anticipating or analyzing possible responses of legal norms encapsulating children’s rights. One such pattern suggests that law’s default response mode when confronted with an arguably new (technological or behavioral) phenomenon is subsumption, i.e., the application of the existing rule (for instance a right under the CRC) to the new phenomenon (e.g., children’s expression online). Legal norms that are considered to have a fundamental character—such as fundamental rights—are more abstract and can absorb new phenomena more easily.

In contrast, it typically requires a particular set of qualified circumstances for the legal system to innovate itself at the level of norms that are highest in its own hierarchy. Such insights from pattern analysis might be helpful, for instance, when considering—from an advocacy perspective—where the best opportunities are to strengthen children’s rights in the digital age. It might indicate, to stipulate a hypothesis, that norms at lower levels in the norm hierarchy may be more permeable for children’s digital rights issues than foundational frameworks.

The second, cautionary observation specific to the interplay between law and children’s digitally connected lives links back to the general reflection about the dynamic ecosystem in which the children’s digital rights discourse is situated: the justification of legal (including
rights-base) interventions. As in all other areas of law, interventions aimed at governing children’s lives in the digitally connected environment need to be politically justified.

This process is complicated by a number of factors. The fluidity of children’s online behavior in interaction with rapidly evolving technology, for instance, makes it often difficult to justify specific interventions over time. Further, despite a wealth of anecdotal evidence and great progress made over the past decade, not all issues can be analyzed based on solid empirical data that might help to justify legal and regulatory interventions. Finally, even if enough evidence has accumulated to propose change, it is typically challenging (and requires time) to find normative consensus in heterogeneous environments given the widespread trade-offs and role conflicts. These observations help to explain, for instance, some of the heated debates about the need for and scope of legal interventions aimed at protecting children online.

An information law perspective reveals not only response patterns and points to typical challenges that occur when law interacts with digital technology. It also indicates a series of significant implementation challenges in cases where law, as a result of a complex set of interactions, intervenes to regulate a digital phenomenon. The list of such implementation challenges is long and includes definitional challenges, the question of the best timing of intervention, and other issues (Gasser, 2014a).

In the context of this chapter, given the strong emphasis on rights-based interventions, it seems worth emphasizing that the legal toolkit provides a broad range of modes (direct intervention, co- or self-regulation) and strategies (command-and-control, incentive based, rights
and liabilities, etc.) that can be applied—and where necessary mixed in the sense of blended governance—to pursue certain policy objectives such as, for instance, the safety and privacy of children in the digitally connected world. Evidence from information law demonstrates the benefit of considering all available instruments in the toolbox when addressing a specific issue (Gasser, 2015). With respect to the children’s rights in the digital age, such a perspective suggests a broad understanding of the term “rights”—consistent with the framing of this chapter.

Consistent with the notion of a blended governance approach is the related (and final) observation that the realization of children’s rights in the digital world is a shared responsibility among many actors (“stakeholders”)—including children themselves, parents and other caregivers, educators, technology companies, governments and international organizations (Palfrey & Gasser, 2008). Recent experiences with legal interventions in quicksilver technology environments—and law’s own limitations—demonstrate the promise of children’s empowerment through educational strategies (Thierer, 2013). At the same time, however, it is the lack of access to parental and other educational resources that, in many of the less-privileged parts of the world, calls for a more holistic approach and the working together of all actors through multi-stakeholder processes (Livingstone et al., 2015a).

References


Cohen, C., & Kahne, J. (2012). Participatory Politics: New Media and Youth Political
Action. Retrieved from


https://core.ac.uk/download/files/34/1512616.pdf


http://webuse.org/p/a39


European Union. (2013, August 5). Protecting EU Kids Online. Retrieved from


Comparative Policy and Practice (pp.15-42). London: Routledge.


http://ssrn.com/abstract=2005272


http://doi.org/http://dx.doi.org/10.2139/ssrn.2687120


http://www.pewinternet.org/2015/08/06/teens-technology-and-friendships/


http://eprints.lse.ac.uk/60231/1/__ls
e.ac.uk_storage_LIBRARY_Secondary_libfile_shared_repos
itory_Content_Net%20Children%20Go%20Mobile%20Project_Reports_Net%20Children%20Go%
Mobile_final%20report_2014.pdf

http://eprints.lse.ac.uk/59584/


http://pediatrics.aappublications.org/content/pediatrics/129/1/13.full.pdf

-use-attitudes-14/Childrens_2014_Report.pdf

http://eprints.lse.ac.uk/50228/1/__Libfile_repository_Content_Livingstone%2C%20S%20Children %E2%80%99s%20use%20of%20online%20technologies%20in%20Europe%28lsr%20.pdf


Porter, G., Hampshire, K., Milner, J., Munthali, A., Robson, E., de Lannoy, A., Bango, A.,
Gunguluza, N., Mashiri, M., Tanle, A., & Abane, A. (2016). Mobile Phones and Education in
Sub-Saharan Africa: From Youth Practice to Public Policy. *Journal of International


Year-Olds*. A Kaiser Family Foundation Study. Retrieved from
https://kaiserfamilyfoundation.files.wordpress.com/2013/04/8010.pdf

People and 'Sexting': A Report Prepared for the NSPCC. National Society for the Prevention of

Roque, R. (2015). Connecting Creativity and Coding: Creativity in the Context of Skills, Literacy,


U.S. Department of Justice, NSOPW. Retrieved from


Western Sydney University. (2014). Amanda Third to present to UN Committee on the Rights of the Child. Retrieved from


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**Endnotes**

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i Lenhart et al., 2015a; children ages 13-17

ii Steeves, 2014; children grades 4-11

iii Ofcom, 2014; children ages 5-15

iv Willemse et al., 2014; children ages 12-19

v Barbosa, 2014; children ages 9-17

vi ITU, 2015; children and young people ages 15-24

vii ITU, 2015; children and young people ages 15-24

viii MCM, 2014; children ages 15-19
| x  | ITU, 2015; children and young people ages 15-24 |
| xi | Willemse et al., 2014; children ages 12-19 |
| xii| Steeves, 2014; children grades 4-11 |
| xiii| Steeves, 2014; children grades 4-11 |
| xiv| Lenhart et al., 2015a; children ages 13-17 |
| xv | Barbosa, 2014; children ages 9-17 |
| xvi| Mascheroni & Olafsson, 2014; children ages 9-16 |
| xvii| Madden et al., 2013; children ages 12-17 |
| xviii| Willemse et al., 2014; children ages 12-19 |
| xix | Sozio et al., 2015; children ages 9-16 |
| xx  | Sozio et al., 2015; children ages 9-16 |
| xxi | Wartella et al., 2015; children ages 13-18 |
| xxii| Steeves, 2014; children grades 4-11; including “news” |
| xxiii| UNICEF, 2013; children ages 12-17 |
| xxiv| Rideout, 2015; children age 13-18 |
| xxv | Olafsson, Livingstone, & Haddon, 2014; children age 9-16 |
| xxvi| Barbosa, 2014; children ages 9-17 |
| xxvii| UNICEF, 2013; children ages 12-17 |
| xxviii| Rideout, 2015; children ages 13-18 |
| xxix| Balraj, Pandian, Nordin, Nagalingam, & Ismail, 2013; children ages 14 and 16 |
| xxx | UNICEF, 2013; children ages 12-17 |
| xxxi| EU Kids Online, 2014; children ages 11-16 |
| xxxii| Barbosa, 2014; children ages 11-17 |
| xxxiii| Cohen & Kahne, 2012; young people ages 15-25 |
| xxxiv| MCM, 2013; young people ages 13-24 |
| xxxv| Ofcom, 2014; children ages 12-15 |
| xxxvi| Steeves, 2014; children grades 7-11 |
| xxxvii| EU Kids Online, 2014; children ages 11-16 |
| xxxviii| EU Kids Online, 2014; children ages 11-16 |
| xxxix| EU Kids Online, 2014; children ages 11-16 |
| xl  | Barbosa, 2014; children ages 11-17 |