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The Politics of Children's Internet Use

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Children's use of the Internet raises fraught issues, frequently contributing to a media-supported moral panic. Whilst digital technologies offer young people unique opportunities for education, entertainment, and the development of key social, motor, and media-literacy skills, they also pose risks, such as those relating to bullying, adult content, unwanted contact, and a displacement of more meaningful activities, such as reading or physical play. How, or whether, these risks should be minimized is the subject of intense media and policy debate, and often technological solutions are favored over social policies that are messy and uncertain in their effectiveness. Nash sets out the evidence regarding the balance of digital opportunity and risk for young people, and uses this as the context to outline policy measures targeted at them. Her analysis raises questions over whether children's interests can be well served by policies developed in the context of a risk-focused public debate.

Reading daily news headlines, it could plausibly be assumed that the Internet's main impact on the lives of children has been the deplorable pollution and corruption of impressionable young minds.[1] This is a very one-sided view. Whilst each headline depicts a legitimate news story in which the well-being of youngsters is at risk, it tells us far more about the media's traditional dependence on bad rather than good news, and, perhaps more interestingly,

[1] For the purposes of this chapter, the term "child" will be taken to refer to any person under the age of 18, using the same definition as the United Nations for the purposes of the Convention on the Rights of the Child. Where the research described in the text refers only to a particular subset of this age group, this will be specified.

about the public appetite for scare stories concerning the Internet and its implied risks for children. In this chapter, we ask whether or not children's interests are well served by developments in Internet regulation, which seem to focus more on digital risks than opportunities. We also explore the factors that might explain this political approach, as well as its inadequacies, before concluding with some reflections on the ingredients of a more balanced approach.

The Dangerous Myth of the Digital Native

One factor which helps to explain some of the moral panic surrounding children's Internet use is the simple point that children are often presumed to be more expert users than either their parents or lawmakers. Characterized by Prensky (2001) as the difference between "digital natives" (those who have grown up with the technology) and "digital immigrants" (those who come to it later in life), this carries an assumption that all children born in the digital era are equally adept at using technology, even displaying the capacity to "think and process information fundamentally differently from their predecessors" (p. 1). Unfortunately, this bluntly essentialist dichotomy is damaging on two fronts. First, it encourages us to think that it's *impossible* for the older generation to understand or keep pace with children's Internet use, and second, it manages to obscure many policy-relevant variations in Internet use and access between children. With the rise of smartphones and tablets, children growing up in Western nations enjoy near-universal access to the Internet from an increasingly young age, but there remain considerable differences and inequalities in the extent and types of use, whilst many tech-savvy adults share many of the characteristics of supposed "digital natives" in their Internet use (Helsper and Eynon, 2010).

The range of influences shaping children's Internet access and use includes both internal and external factors. Most obviously, each child brings a different range of skills to their online activities, ranging from basic motor and technical skills, to more specific Internet-related abilities such as search techniques, as well as generic skills such as information literacy and emotional intelligence. Unsurprisingly, the wider the child's range of skills, the more variety in their use of their Internet and the more likely they are to benefit from it (Livingstone and Helsper, 2010).

Amongst the most important external factors that shape children's Internet use are the availability of home access and levels of support (Eynon and Malmberg, 2011). Although households with children are much more likely to have Internet access than those without (Eurostat, 2017), even the mass

adoption of mobile phones has yet to drive universal access in Western countries (Mascheroni and Olafsson, 2016). In terms of support, it's not just a question of how much, but also from whom and what type. Support from those with positive Internet experience is more valuable in building children's online confidence (Eastin, 2005), whilst children whose parents lack confidence about Internet use may come to rely more heavily on peer support, with fewer opportunities for parents to pass on social norms (Palfrey and Gasser, 2008) or provide emotional backup (Ito et al., 2010; Turkle, 2011). Building on these findings about the importance of social support we can see that the "digital natives" myth is damaging in a third sense, in so far as its frequent repetition actually risks undermining parents' and educators' confidence in their own ability to provide positive support to the young Internet users in their charge.

Understanding the variability of children's Internet experiences is vital for policy purposes, both because such inequality in access and use may limit their development of digital skills, and also because the differences mean that not all children face the same combination of risks and opportunities. Laws, for example, that set a minimum age below which children cannot consent to their digital data being processed may do many children a disservice, either because they limit access to apps and services for those mature enough to understand the risks sooner, or enable use by those old enough but who still struggle to see the risks. Policy responses that treat all children as skilled and confident "digital natives" will be fundamentally inadequate, so policy, parenting, and educational strategies should be adjusted accordingly. The following two sections expand on this claim, analyzing how the "myth of the digital native" masks important disparities in the contexts and experiences of children's Internet use, first in education, and second in their uses of digital technologies outside school.

Hopes and Expectations: Internet Use and Education

Despite the media's focus on the Internet's dark side, technology policy does not always follow suit. Instead it has often been driven by optimistic (and potentially vote-winning) strategies to achieve beneficial social outcomes. Information and communication technologies have long been seen to offer many valuable opportunities for children, potentially delivering educational benefits such as greater engagement, improved learning outcomes, and skills important for workforce participation, and also more personal benefits, such as enhanced self-esteem or self-efficacy (Davies and Eynon, 2012). These expectations are often visible in the political rhetoric surrounding the launch of new investment programs, albeit frequently colored by a naive

technological determinism that drives a fascination with investment in hardware rather than people (Livingstone, 2009).

Whatever the rhetoric, governments across most Western nations have invested significant resources in schools' digital infrastructure since 2000. Even though this is clearly a positive development, the evidence of educational benefits is mixed. Even for those children who do regularly use digital resources at school, the quality of experience may vary dramatically, depending on factors such as teachers' proficiency in integrating technology into class work or the level of support provided to help staff and children work effectively (Warschauer et al., 2014). The inequity of these conditions is further exacerbated by the fact that schools from richer and poorer areas often face very different educational challenges which technology implementation cannot be expected to overcome (Warschauer et al., 2004).

A further reason to be wary of the grand claims made for the role of the Internet in transforming children's education comes from the constrained nature of its use in schools. Most educational policies regarding technology investment in schools are driven by a determination that this will improve academic outcomes, but they are likely to be used only within preexisting curricular constraints (Livingstone, 2012). Schools are also, understandably, charged with ensuring safe and appropriate behavior, such that school Internet use is usually filtered and monitored. Social-media use is often forbidden or heavily restricted. Together, these constraints mean that pupils lacking easy access to the Internet at home are automatically at a disadvantage compared to those who have opportunities for more flexible and autonomous use at home (Wilkin et al., 2017).

Unfortunately, expectations of the Internet's improving effect on formal educational outcomes have yet to be fulfilled, and increasingly, research studies reveal the complex social, economic, and institutional factors that affect how children and young people experience technology (Wilkin et al., 2017). Nor does it seem to be the case that the Internet's collaborative and creative potential is exploited to the full for academic purposes. As Davies and Eynon note: "[T]he Internet serves most of all as a reassuring quick fix for teenage learners" (Davies and Eynon, 2012: 88), providing opportunities for consultation of a variety of information sources whilst working, whether the sources be Google, Wikipedia, or friends.

Perhaps such a focus on formal educational outcomes is misplaced. An influential early study for the MacArthur Foundation argued that teenage Internet users are increasingly engaged in a "participatory culture," namely, "a culture with relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing one's creations and some type of informal mentorship whereby what is known by the most experienced is passed along to novices" (Jenkins et al., 2006: 3). As the next section will make

clear, many of the skills required to engage in such a culture may be better learnt through "informal learning" outside schools, meaning (rather ironically) that personal, private Internet use at home which gives rise to so many parenting fears may ultimately be best placed to build the soft skills required in digital cultures.

Personal Internet Use: Risks and Opportunities

Many aspects of children's personal lives are mediated by the Internet. It offers valued platforms for creating and playing with identities, making and talking to friends, even for living out some of the most mundane aspects of family life. It's not so much that these activities are new in themselves, but rather that children and teenagers "are doing this while the contexts for communication, friendship, play, and self-expression are being reconfigured through their engagement with new media" (Ito et al., 2010: 1). Such reconfiguration is itself helping to reshape existing *practice*, such as where traditional efforts by teenagers to change their appearance and image give way to the conscious creation and curation of online identities, as well as the revision of existing *norms* (for example, around the use and reuse of third-party-created content). As these altered practices and norms play out, the array of risks and opportunities facing children is also transformed, and it's no surprise that many media-driven outpourings of moral panic concern supposed horrors resulting from children's determination to connect with others online. For many parents and policy-makers, perhaps the greatest source of anxiety is the extent to which children and teenagers can conduct much of their personal life online in an environment which is perversely private in the sense that a responsible adult can easily be excluded, but public in so far as the content or communication is effortlessly opened up to unknown others.

Over the past decade, we have seen some notable changes in the patterns of children's Internet use. The first relates to the rise of mobile devices and tablets; the second to the ever younger ages at which children first use the Internet. The 2017 OfCom children and media use survey reports that sixty-five percent of UK children aged three to four are using tablet computers, for example, whilst ninety-three percent of twelve- to fifteen-year-olds use (but don't necessarily own) a mobile phone (OfCom, 2017). Despite the emphasis placed on digital technology uptake in schools, the most common point of access is still home rather than school, and increasingly in private by children using personal devices such as laptops or mobiles, in whichever space they choose (Mascheroni and Ólafsson, 2014). The most common uses of the Internet amongst nine- to sixteen-year-olds are for entertainment, such as playing online games, watching videos, or listening to music, or for communicating

with friends using instant messaging apps or social networks (Mascheroni and Ólafsson, 2014).

Although many children are indeed engaged in what Jenkins describes as "participatory cultures" (Jenkins et al., 2006), perhaps playing online games with others or publishing music, videos, and photos for others to share, these activities are not as popular as simpler activities such as viewing content provided by others, supporting the concept of a "ladder of opportunities" which children may ascend at different rates and to different levels (Livingstone and Helsper, 2007; Hasebrink et al., 2011). Ito et al. (2010) note that for most teenagers, creativity is mainly expressed in "everyday personal media production" as they document their daily lives through social media, but that for some, this does become a "jumping-off point" for more elaborate forms of creativity (p. 290). And whilst these more creative activities (photography, music, or video production, etc.) may initially be interest-driven, they can develop into intensely social activities, generating their own communities of interest and becoming important forms of self-expression, the latter being a particularly important feature of Internet use for older children and teenagers.

Starting from the premise that identity is not fixed and objective, but fluid and mutable, the Internet enables the "performance" of identity across a range of sites and for different audiences, albeit with imperfectly permeable boundaries (boyd, 2007; boyd and Marwick, 2011). Although identity performance takes place across a range of platforms including messaging and texting, the rise of social media, with its central focus on a self-constructed personal profile, has provided a natural home for such activity. While social network sites such as Facebook are currently for use only by those over thirteen, sixty-eight percent of European children between nine and sixteen claim to have a social networking profile, with age-specific practices varying from twenty-seven percent for those aged nine to ten, to ninety-three percent for those at the top of the age range (Mascheroni and Ólafsson, 2014). In the United States, seventy-six percent of online teenagers between twelve and seventeen use social networks, with Facebook still proving the most popular service (Lenhart, 2015). Whilst the use of social media for social and expressive purposes is not necessarily problematic, these figures do raise legitimate policy concerns, implying that large numbers of children are using sites not designed for their age group, and potentially without parental consent or knowledge.

Whilst children and teenagers may be in thrall to the potential of social media to help them curate their online identities, they are also reliant on them for communication. This ability to master the affordances of particular platforms or technologies and make them work for a particular end, in this case establishing or maintaining friendships, is a skill which many, particularly

older children and teens, manifest. Many studies note how young Internet users seamlessly manage a portfolio of different communication tools to sustain their social and family relationships, as well as mobile texting or messaging apps for quick and intimate conversations, social network status updates to check in with a broader group, or phone and video calls for private and urgent conversations (Ito et al., 2010; Davies and Eynon, 2012; Lenhart, 2015). Although some have raised concerns about the burden of managing so many different modes of communication (Turkle, 2011), and the strains of managing complex social hierarchies with relatively unsophisticated tools (Ito et al., 2010; boyd and Marwick, 2011), the majority of the evidence suggests that Internet technologies play a key role for children and young people in expressing their developing and mutable social selves.

Internet Regulation: Protecting or Politicizing Children?

In contrast to the panic-laden news headlines that have accompanied children's adoption of the Internet, the more positive aspects of Internet use rarely receive the same high degree of media coverage or policy recognition. This isn't to say that concern for the risks involved is illegitimate: clearly, governments, parents, and educators have a duty to protect. Rather, there are two problems with such a one-sided approach: first, there is a tendency to ignore messy details, such as the fact that some children are more vulnerable than others or that harm is hard to detect, and second, it ignores the possibility that risk and opportunity may go hand in hand.

Whilst there is a rich and expanding body of literature investigating how children's Internet use shapes their experience of risks and opportunities, there are still some real weaknesses. From a policy perspective, one of the biggest problems is that we know relatively little about the relationship between risk and actual harm, or the way in which different risk factors combine to increase or decrease risks for particular children. Most fundamentally, there are real methodological and ethical challenges involved in measuring harms to children resulting from Internet use; so many studies in this area measure not harm, or even risk, but the "risk of risk," for example, the likelihood that any one child will access pornography, rather than the likelihood that he/she will be harmed by this experience (Slavtcheva-Petkova et al., 2015). This poses a problem for responsible evidence-based policy-making, meaning that even with the best of intentions, policies are likely to be constructed on the basis of judgments about the *potential* risk of Internet use.

Despite this limitation, there are many excellent studies investigating the range of risks that children are exposed to in their digital activities. Probably

the most commonly studied or discussed risks are exposure to grooming, sexual content, and bullying; however, there is often little consensus over their prevalence. Cyberbullying (understood as bullying behavior experienced online), has proved particularly hard to measure, with a recent meta-analysis noting prevalence figures of between ten and forty percent of adolescents reporting experiences of cyberbullying (Kowalski et al., 2014). Similar variation is found in studies of sexting (sending sexual messages or images via a mobile device); one systematic literature review suggests that anywhere between twelve percent and thirty-five percent of adolescents receive sexts, whether textual or photographic (Klettke et al., 2014). Although no single factor can explain these differences, they are likely to result from variations in how researchers define and measure key concepts, such as "cyberbullying," as well as the timescale that respondents are asked to reflect upon.

In addition to these long-acknowledged risks, the Internet's capacity to cater for more specialist audiences has seen the rise of networks and communities exchanging information and advice on issues such as anorexia, bulimia, self-harm, and suicide. Whilst there is little disagreement in the academic literature as to the potential harm of such sites, there is uncertainty about the balance between the dangers of normalizing damaging behavior, and the value for vulnerable youngsters of finding a non-judgmental space to discuss personal problems with similar others (Slavtcheva-Petkova et al., 2015). There is also as yet little research which shows that otherwise healthy children or teenagers are at risk from such content. Indeed, many studies in this field show that children who are vulnerable as a result of difficult personal or family circumstances are more likely to demonstrate behaviors associated with digital risks. For example, acknowledged predictors of exposure to pornography, self-harm material, or other online risks include depression, sexual abuse, eating disorders, or risk-seeking behavior offline (Wolak et al., 2007; Mitchell and Ybarra, 2007). Such children may be doubly at risk in the sense that they also lack resources or "resilience" to cope with risky content or relationships, and may also be less likely to seek support from family or other responsible adults. This poses particular challenges for policy, suggesting a need to more effectively target resources at vulnerable groups.

Counterintuitively though, other studies have revealed that greater opportunities of use also go hand in hand with greater exposure to digital risks, meaning that older, more sophisticated users, or those from middle-class households who enjoy better access, also encounter more risk (Livingstone, 2009). These findings suggest that policy-makers seeking to reduce exposure to digital risks need to find ways of supporting children who are most vulnerable on other measures, as well as those who are privileged and confident Internet users—potentially two very different groups.

Policy Responses—Serving our Children Well?

As noted earlier, media and policy preoccupation with the negative aspects of children's Internet use is problematic if this results in policy outcomes which *restrict opportunities* at the same time as *reducing risks*. In practice, this is a real concern, as many available policy tools offer protection only by reducing opportunities for the free exchange of information or speech. The importance of balancing these competing goals is recognized in legal or constitutional protections in many countries and in international instruments such as the United Nations Convention on the Rights of the Child.[2] In this next section, we ask whether political imperatives (driven by media pressure) result in policies that generally do strike the right balance between the protection of well-being and protection of free speech.

It is worth noting at the outset that our concern here is activities which may pose risks for children, rather than those which illegally harm children (such as creation or circulation of child-abuse images). It is often argued that in a situation of such uncertainty it's better to employ precautionary principles to minimize the occurrence of possible harms, particularly when seeking to protect potentially vulnerable individuals. It should also be acknowledged that whilst research evidence may be scarce, there are many other factors (moral, cultural, religious, economic, etc.) that can legitimate policy intervention. But it shouldn't be forgotten that there are also some very poor reasons for policy intervention, such as the "symbolism" of being seen to do something even if that "something" fails to ameliorate the original policy problem (Heins, 2001).

A standard policy response to many of the risks outlined in this chapter, for example, is that certain sorts of digital content deemed potentially harmful to children should be blocked or filtered, a child-protection solution with a long history in other media (Heins, 2001). Filtering methods can be applied at different "choke points" across the Internet, ranging from state-directed filtering schemes where blocking is carried out at backbone level, to filtering by search engines or Internet Service Providers (ISPs), all the way down to filtering at the level of the household or institution. Although advocates of free speech argue that filtering decisions should be made as closely as possible to the individual user, several countries, including Denmark, South Korea, and the United States have introduced legislation requiring publicly funded schools and libraries to install filtering software to protect children using their facilities. Other countries, such as the UK, have introduced "active choice" policies, whereby households signing up to new broadband contracts must be asked whether they wish to install family-friendly filters at household level, which would then filter

[2] Available at www.ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx. (Accessed April 10, 2018).

content across all content-accessing devices. This may leave parents with a measure of control, but even so remains a rather blunt tool that cannot distinguish between the differing degrees of protection needed for various members of the household.

The introduction of mandatory filters may seem to be a positive step toward reducing access to potentially harmful materials for young children, but it remains a controversial policy and there is little empirical evidence of its efficacy (Przybylski and Nash, 2017). First, because it restricts access to otherwise legal content, often for adults as well as children, but also because no filter is ever one hundred percent effective, meaning that legitimate content may be erroneously blocked or undesirable content let through. Over-blocking is particularly problematic if the material has educational or informational value, such as that pertaining to relationships, sexual health, or even art. There is also a danger that when filtering mechanisms are in place, parents or educators may be lulled into a false sense of security, believing that no further risks exist. Unfortunately, calls for mandatory filtering are politically attractive as they articulate a decisive policy response, and are more clearly understood than subtle calls for improved digital literacy training or more effective parental interventions.

If we are to question whether filtering policies effectively protect children from significant risk or harm without undue damage to their rights to freedom of expression and information, we must also ask whether access policies do enough to support *equal* rights. Although sections of this chapter have noted the near-universal efforts in Western developed countries to get schools online, there are still significant inequalities in the availability and use of digital technologies in schools, and children lacking easy Internet access at home remain at a disadvantage. In the absence of wide-scale investment in home access, it is vital that better support is provided for well-planned integration of digital technologies in schools, including teacher training and curriculum development. Just as importantly though, it would be highly beneficial if after-school and holiday provision could find ways of providing access to digital devices in ways that support autonomy and exploration, better mimicking informal home use.

To a large degree, policy debates around children's Internet use have long been dominated by concerns about harmful content and access, but other newer policy issues are emerging rapidly, and to do justice to the next generation of Internet users these must be given more consideration. Of these, probably the most important is privacy. In a context where ever younger children are using a broadening array of digital media, the data trails left by minors are increasing exponentially. Internet-connected toys that promise speech or haptic interactions may record a child's most intimate conversations. Their well-being and health are subject to surveillance and reporting by a fast-expanding market of

Internet of Things technologies, such as smart baby socks or nappies, and fitness or tracking devices. In schools, pupils' behavior and activities are recorded on corporate-provided databases and apps, with biometric markers such as fingerprints regularly utilized to provide access to services. Despite these developments, children are ill-served by privacy laws (Matwyshyn, 2012). Whilst there have been efforts to introduce legislation to address the specific needs of those too young to contract on their own behalf, such as the US Children's Online Privacy Protection Act 1998 (COPPA) or the EU's General Data Protection Regulation (GDPR), in practice this has just meant that many popular services or products apply a minimum age limit of thirteen,[3] but lack effective means of policing this (Macenaite and Kosta, 2017). This leaves young users with little protection, and potentially encourages both children and parents to lie about their age to gain access to a desired service, whilst also denying younger users autonomy. It's also hard to see how consent-based regulatory systems will operate in a context where more and more digital interactions take place without the need for a screen, or indeed any other interface where complex terms and conditions might be displayed.

There is as yet little evidence of demonstrable harms resulting from the use or misuse of children's data, or the failure to respect their privacy. We do have emerging evidence of pathways to harm, however: connected toys or home devices that can be hacked to enable communication with or to surveil a child; or the expanding market for children's digital identities, enabling fraudsters to take out loans or purchase goods in their names. More worryingly, we might want to question the ethics of our direction of travel: toward a world where good parenting relies ever more heavily on digital monitoring or surveillance (Leaver, 2017), or where products are designed and marketed for the "algorithmic child," based on rich and deep personal data profiles collected from their online behaviors. It may be harder to quantify or observe this range of privacy-related risks, but it doesn't mean they matter less than the content or conduct-related risks so frequently discussed in policy circles.

Conclusion

For many, there could be no better illustration of the "dark side of the Internet" than the media's hysterical portrayal of children's daily exposure to pedophiles, pornography, and gambling. Yet, although such risks undoubtedly do exist and merit serious-minded attention from policy-makers, the moral panic surrounding their prevalence serves to obscure another dark

[3] The GDPR allows member states to set a minimum age of digital consent between thirteen and sixteen, meaning that in practice this age limit will vary.

corner of this debate, namely the misrepresentation of children in Internet policy and regulation, and the common tendency to favor policy measures that restrict, rather than expand, access to information and speech. This chapter has sought to clarify how purported concern for the well-being of our children and teenagers is shaping the future of the Internet. Although there's certainly nobility in such concern, it's unfortunately not obvious that children's interests are necessarily well served by the dominant trends in Internet policy which seem to promote protection but not empowerment (Lund and Livingstone, 2012).

Reflecting on the research discussed in this chapter, we can draw out four more specific observations that could help us improve child-focused Internet policies. First, too much emphasis is placed on reducing some of the most feared (but not necessarily most harmful) risks by introducing technical fixes such as filtering, rather than engaging with the messy realities of parenting and child development, or the data-driven economies of the platform society. Second, there is too little acceptance of children's rights to freedom of expression and information, often regarded as less important than their rights to protection from harm, even when that harm is uncertain or unlikely. Such an imbalance may be partly understood as a result of a general failure to accept that childhood is itself a socially defined construct, and that media portrayal of children as helpless, vulnerable victims of online harms is outdated at a juncture where youngsters are capable of both perpetrating online abuse and helping to protect themselves against it. Third, more effort must be made to support positive use or help those who are most vulnerable, rather than the easy-to-reach middle classes' children with anxious parents. Finally, and perhaps more importantly, there needs to be a wider recognition that no one is well served if genuine concerns for child protection are manipulated and misused in the pursuit of other less noble political goals, such as the quiet pursuit of moral conservatism and social control. Many of those who oppose heavy-handed content filtering might be more easily appeased if significant policy resources were also devoted to promoting access, participation, and positive Internet use, underscoring a genuine political commitment to supporting children's well-being. The Internet, quite simply, poses both risks and opportunities for young users, and a serious-minded policy approach should embrace all the resulting trade-offs and complexities without being driven by a politics of fear.

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