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‘The whole world’s watching really’: Parental and educator perspectives on managing children’s digital lives

Rachel Buchanan

University of Newcastle (UON), Australia
ORCID 0000-0003-3594-1110

Erica Southgate

University of Newcastle (UON), Australia
ORCID 0000-0003-1104-8029

Shamus P Smith

University of Newcastle (UON), Australia
ORCID 0000-0001-9135-1356

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Corresponding author – Rachel Buchanan, School of Education, Faculty of Education and Arts, University of Newcastle, (UON), University Drive, Callaghan, NSW, 2308, Australia.
Email: Rachel.Buchanan@newcastle.edu.au

‘The whole world’s watching really’: Parental and educator perspectives on managing children’s digital lives

Abstract

Teachers are under increased pressure to teach children digital skills and parents are having to manage children’s online presence as well as their offline lives. Much of the discussion surrounding the issue of children’s digital footprints highlights the potential present and future risks that children could be exposed to. While parents and teachers are expected to educate and protect children online, little is known about what parents and educators know in the Australian context, and how they feel about being the custodians of children’s digital presence. The purpose of this paper is twofold. Firstly, we report on the *Best Footprint Forward* project which employed focus groups to qualitatively investigate the digital footprint awareness of parents and teachers from three primary schools in regional Australia. Secondly, we provide an ethical framework that can be used to provide guidance to those who teach children on how to manage their online presence. Parents and teachers were very aware of the issues surrounding digital footprint management and cyber safety for children but had little awareness of the positive potential of digital footprints, nor how to help children manage their digital lives. In reporting the uncertainty experienced by these two groups we seek to highlight the ethical complexities of children’s participation in digital cultures and provide a framework for engaging with these complexities.

Keywords: digital footprint, parents, teachers, children, ethics, digital culture, online presence

Introduction

In an era of rapid technological change, children are often the focus of adult ambivalence toward societal change and shifting mores (Radesky et al., 2016). Regarding digital and online technologies, much of the discourse surrounding children’s access to popular culture has been shaped by anxiety (Tsaliki, 2015) about the potential present and future risks that children could be exposed to. While children use a variety of digital tools and internet-based applications for social connection and entertainment outside of school (boyd, 2014) concern has been raised in the media about the dangers these technologies pose to children. These dangers have been expressed in terms of: the physiological effects of screen time (Picherot et al., 2018); breaches of security, privacy concerns and exposure to cyberbullying, pornography and online predators (Office of the eSafety Commissioner, 2018); addiction and

problematic usage (Anderson et al., 2017); and children jeopardizing future opportunities through the creation of digital footprints that reflect poorly upon them (Moore, 2012). The utility of such technologies for the workforce, however, has meant that schools have been pushed to incorporate the use of digital technology into the curriculum so that children develop the necessary skills and knowledge to be competitive in the global economy (Buchanan, 2011). The push for children to be educated with and about digital technologies, combined with the potential risks associated with these, puts those responsible for protecting them in a bind.

The Australian curriculum, like the curricula of many other countries, includes technological skills that need to be explicitly taught to students. Such skills are necessary for negotiating, not just school, but also homes and social spaces. Children now face the ubiquitous presence of online technologies such as computers, mobile phones and tablets and the increased number of appliances (such as televisions) and toys that are connected to the internet. The uses of such internet connected technologies are expanding. For children this is likely to include greater use of wearable devices (Lupton and Williamson, 2017), increasing exposure to educational and behaviour management technologies (such as ClassDojo) in schools (Williamson, 2016), and devices (such as Alexa or Google Home) that capture data in the home and upload it to the internet (Lupton and Williamson, 2017). In this context, parents and teachers find themselves the custodians of children's online lives. The tension between online risk and the imperative to teach children to navigate digital spaces and digital tools poses difficulties to those responsible for protecting children. With one in three users of the Internet being a child, little has been done legislatively and structurally to ensure children's rights and privacy (Livingstone et al., 2016), leaving parents and teachers with this responsibility. Yet, little is known about what parents and educators in Australia know, and how they feel, about being the custodians of children's digital presence.

The purpose of this paper is twofold. Firstly, we report on the *Best Footprint Forward* project which utilised focus groups to qualitatively investigate the following research questions: (1) What do teachers and parents know about digital footprints; and (2) What do parents and teachers do to help children manage their digital footprints? Secondly, we provide an ethical framework that can be used to provide guidance to those who teach children on how to manage their online presence. Parents and teachers were very aware of the issues surrounding digital footprint management and cyber safety for children but had little awareness of the positive potential of digital footprints, nor how to help children manage

their digital lives. In reporting the uncertainty experienced by these two groups we seek to highlight the ethical complexities of children's participation in digital cultures and provide a framework for engaging with these complexities. While the empirical work that we report here is localized, given the globalized nature of children's digital participation, the ethical implications for parents and teachers are more broadly applicable. This paper builds on previous work done on children's digital footprints (Buchanan et al., 2017) to present an ethical framework (Graham et al., 2013; Southgate et al., 2017) as a guide to the complexities of digital custodianship and will be of interest to those concerned about children's digital wellbeing; that is parents, carers, and educators.

Children's and adolescents' Internet use

Today's children are in constant online communication with their peers, creating new standards of behaviour and communication; with participation in this digital culture facilitating cognitive, social and emotional development (Yan, 2018). Adolescents and children are enthusiastic users of the Internet and social media (Sherman et al., 2018) with over ninety percent (91%) of European children (from 28 countries) going online daily in 2016 (Eurostat, 2016). In the US, fifty-seven percent of children (aged 3-17) use the daily Internet at home (Child Trends Data Bank, 2015). Australian children are particularly avid users of the Internet. Close to two-thirds (59%) of Australian children aged 8 and above spend more than the recommended 2 hours per day in front of a screen (Houghton et al., 2015), and more than four in five (83%) of Australian adolescents go online 3 or more times daily (ACMA, 2016). As of 2014, a quarter of Australian children between the ages of eight and twelve have an account on Facebook and a fifth are using Instagram (Holloway, 2014), (even though this is in breach of the terms of service that stipulate that users must be over the age of thirteen). While within Europe there has been a history of research exploring the risks to, and benefits of, Internet use for children (Livingstone et al., 2017) this hasn't been explored as thoroughly in the Australian context (Donkin et al., 2015). What is evident is that children's use of the Internet is expanding their digital footprints, and that growing up with digital technologies means that children and young people have a larger and more diverse digital identity than previous generations (Wakefield, 2014).

Digital footprint management

Digital footprints are the digital traces left when people go online. While some of this is deliberately created, it also encompasses the passively recorded evidence of people's online activity (Thatcher, 2014). From a synthesis of existing research, we have developed a conceptualization of digital footprints across transactional, consumer and reputational dimensions. Transactional digital footprint refers to data that is required when doing business online (ACMA, 2013). To conduct this business, people agree to provide the data required; thus, this aspect of digital footprint is somewhat out of an individuals' control. The consumer aspect of digital footprint is data that records individuals' activities as consumers of the Internet – the cookies, browsing history, etc. (Thatcher, 2014). The reputational aspect of digital footprint is what people have the most control over as this can be actively shaped and planned in ways that the other dimensions of digital footprint cannot (Fertik and Thompson, 2015). Reputational dimension is the focus of this paper.

The digital reputations that people create are of increasing importance in the digital economy (Fertik and Thompson, 2015), particularly for employment and career development (Hooley, 2012). Human resource practitioners are using social media in selection, recruitment and hiring (Black and Johnson, 2012; McDonald et al., 2016). People should be taught to curate a positive digital footprint in order to maximise their life opportunities and career development (Camacho et al., 2012; Fertik and Thompson, 2015), yet educationally this is not being addressed (Benson et al., 2014). While the dominant discourse around digital footprint suggests that these are a liability to be avoided (Camacho et al., 2012) a positive digital footprint can be understood as asset, a “personal brand” that allows others to see your interests, achievements and skills. A digital footprint allows for a quick “google” to verify identity, competency and experience, and to find reputational evidence. Parents are aware of the potential negative consequences of the digital footprints that their children are generating, and consequentially often mediate their children's online activities (Jennings, 2017; Livingstone et al., 2015) so as to prevent children from not only reputational harm but also from other online risks.

Online risks and parental mediation

The increased use of digital technologies in schools have left not only parents and carers, but also teachers grappling with the responsibility of being the custodians of children's online presence. While Australian schools are increasingly opting for one-to-one laptop programs (Blackley and Walker, 2017), many schools have yet to respond to the challenge of helping

students develop reputational management skills. Schools are caught between children's social and recreational uses of the Internet and their duty of care to protect their students both on and off line (Luke et al., 2017). On the one hand, schools are tasked with giving students 21st century skills - the knowledge, practices and skills required for participation and success in a technological world. On the other hand, concerns about digital footprints, bullying, privacy, and risk have led school systems to respond with attempts to govern students' online exchanges (Selwyn, 2010). While they regard the Internet as a positive in children's lives, parents and teachers nevertheless are concerned about the potential for harm that comes with children's online interactions (Schrock and boyd, 2011). The risks that concern parents include: online predators, solicitation, online harassment, and sharing of personal information (Schrock and boyd, 2011; Sorbring, 2014); the physiological effects of screen time (Picherot et al., 2018); cyberbullying (Monks et al., 2016); Internet addiction and problematic usage (e.g. viewing porn or other illicit activity) (Anderson et al., 2017; Johnson and Keane, 2017); the data that is collected about children (Lupton and Williamson, 2017); and the reputational damage of a badly managed digital footprint (Blum-Ross and Livingstone, 2017; Moore, 2012).

These risks are highlighted by the media in ways that overstate the danger and heighten parental concern (boyd, 2014; Livingstone et al., 2010, 2017; Schrock and boyd, 2011). Parents and teachers see it as their role to mediate children's Internet access (boyd and Hargittai, 2013; Livingstone et al., 2015; Vaala and Bleakley, 2015). Yet, in the Australian context it has been reported as being 'virtually impossible' to limit children's screen time to the recommended two hours per day (Houghton et al., 2015). Given the educational expectations and benefits of digital technologies and the social usage that children make of digital technologies, mediation of children's usage has to take into account a number of factors. These include: the perceived risks and online dangers (Schrock and boyd, 2011); children's agency in their usage of the Internet (Facer, 2012); the equity implications of denying access (OECD, 2016); and the education that needs to be provided to children so that they can make the best use of the available technologies. Additionally, many parents are themselves building their children's digital footprint through parental over-sharing or 'sharenting' online (Blum-Ross and Livingstone, 2017). Such parental practices need to be balanced with considerations of children's rights (Third et al., 2015). The multiple factors that need to be considered suggest that guiding principles need to be offered parents, carers and educators as a way to think through the complexities of their roles as digital gatekeepers.

Before we present a model for this purpose, we first consider children's agency and report on our study of parents', carers' and teachers' knowledge, awareness and attitudes towards children's digital footprints.

Theoretical position

We take the position that children are agents who actively construct their own lives, play a part in the lives and societies around them and form their own independent relationships and cultures (James, 2009; Valentine, 1999). While here we report on the perspectives of those that care for children, our position is that as children have agency in their lives, actively participate in digital cultures of their own making, and that parental and educators' perspectives can provide only a window onto these cultures (Valentine, 1999). Given that children have agency (Coffey and Farrugia, 2014), it is a real challenge to protect them whilst still allowing them to exercise this agency. Speaking to the adults who care for and educate children allows for the exploration of that challenge. While much discourse around children's Internet usage positions children as being naïve and in need of protection, this position has been critiqued (Facer, 2012) and supplanted by work that describes how children and young people use the Internet in ways which reflects their agency (boyd, 2014). In consideration of the emerging and rapidly changing uses of online technologies, we have chosen to use the ethical principles that underpin research (Southgate et al., 2017) as the basis for this discussion of an ethical framework for exploring the management of children's online presence. Like the process of exploratory research, the long-term effects of the ubiquity of digital technologies in children's lives is largely unknown and not entirely predictable.

Data and Setting

The aim of the larger *Best Footprint Forward* project was to investigate child, parent/carer and teacher knowledge, awareness and attitudes towards digital footprints and strategies used to manage these. Here we report only the results from focus groups held with parents and teachers. Through these focus groups we sought to address the following questions: (1) What do teachers and parents know about digital footprints; and (2) What do parents and teachers do to help children manage their digital footprints? The focus groups provided the participants the opportunity to build on one another's explanations and facilitate discussion in a safe, peer-mediated space (Punch and Oancea, 2014).

Participants

Participants were parents (n=9) and teachers (n=14) of primary school students in years 5 and 6 (the final years of primary/elementary school in New South Wales [NSW]) drawn from the three schools participating in the *Best Footprint Forward* project. The participating schools were situated in a regional area of NSW, Australia. Focus groups took place at each of the three participating schools. These schools have been assigned pseudonyms for the reporting of results; West Public School (PS), Lake Public School and Beach Public School. Given the exploratory nature of the study, convenience sampling was used. The principals of 25 primary schools in the local area were emailed information about the *Best Footprint Forward* project and an invitation to participate. The first 3 that agreed to participate were included in the study.

Ethical procedures

The study was approved by our University's Human Ethics Research Committee [HREC approval number H-2015-0293] and through the NSW Department of Education and Training [SERAP approval number 2015436]. Signed informed consent was obtained from parents and teachers participating in the focus group sessions. Participants were told that they were free to stop participating in the focus group sessions at any time.

Data collection and analysis

Focus groups lasted approximately 40 minutes and were held during school time with parents and after school with teachers. They were audio-recorded and transcribed verbatim. The focus group discussions were guided by a schedule of questions and prompts (Punch and Oancea, 2014). A YouTube clip showing parents posting an ultrasound scan of an unborn baby was used to elicit discussion about children's digital footprints. This was followed by questions about what digital footprints are, what children do online, and what they thought the role of parents and teachers is in educating children about digital footprints. Transcripts were manually coded, and thematic analysis undertaken according to the process outlined by Braun and Clarke (2006), in which rather than conceptualizing themes as 'emerging' or being discovered by the researcher, themes are crafted and honed in response to an analytic process of reflexive examination of the data.

Analysis

Semantic analysis (Braun and Clarke, 2006) provides straightforward answers to the research questions. Parents and teachers spoke of their awareness of digital footprints, saw them as a liability to be avoided, and they worried that children do not understand the longevity of what goes online. Parents discussed the strategies that they employ, not to directly manage their children's digital footprints, but more to manage their access to the Internet in light of the range of risks that they are aware of: predators; security; cyberbullying; and digital footprints. These strategies varied from not letting children have social media until age thirteen, being Facebook 'friends' with their children to see what they get up to, having access to their children's passwords, setting social media to private, and monitoring their children's online activities. Teachers spoke about educating children of the risks and bringing in outsiders (police and digital experts) to talk about cyber safety with their classes.

Reflexive examination of the data for latent themes (Braun and Clarke, 2006) brought into view the theme of transition. Transition suggests change from one state to another, and for parents and teachers this change is marked by uncertainty. Various changes were discussed during the focus groups: the children getting older and transitioning to high school; teachers' workloads changing in response to an increased focus on technology; and the newly porous boundaries between home and school. Yet, the overarching transition responsible for the difficulties being experienced was the societal shift into a 'digital era'. With this latter shift, the accompanying change in social mores were discussed in tones of concern. Emotional words were used throughout each of the parent and teacher focus groups, suggesting that there is an emotional dimension to discussion of the Internet. Parents spoke of their worry, of their fear for their children, of feeling threatened and scrutinized, that the implications of the topic were 'scary'. Teacher emotions also included anger, as they felt unprepared and abandoned by the Education department for the situations that they were dealing with on a day-to-day basis. We shall now use these parent and teacher voices to explore how they discussed the transitions that they identified.

The transition to high school

Parents and teachers saw the last two years of primary school as being an important time in children's education. It was viewed as time to prepare students for the increased access to the Internet and freedom that high school students experience.

So, my older boys are in Year 7 and Year 9. The difference between when they were in Year 5 and 6 to high school, everyone's allowed to have a phone with them all day at school on school WiFi. So, I think we need to do

something in Years 5 and 6 for when they're ready to get there [*Male parent, Beach PS*].

I think Year 5 and 6 is probably the key area because like we were saying before they get to high school and all of a sudden, it's everywhere. So, we're a lot more support here and then all of sudden they get to high school and it just falls away. So, if they don't have that support at home, which would be lovely if they all did, they can be a bit lost, not really know how they make good decisions I'd say [*Male teacher, Beach PS*]

Both parents and teachers were concerned about the potential harm that children could render themselves as they transition into from childhood. The following excerpt is reflective of a common sentiment.

What worries me is they make mistakes and it's there forever [*Female teacher, Beach PS*]

At Beach Public School, parents talked over each other as they expressed their worries:

How do you teach them to be responsible enough to- [*Female parent, Beach PS*]

-Ways for them to see the consequences of their actions without actually having to do it. [*Male parent, Beach PS*]

To face. Yeah. Without facing a horrible incident [*Female parent, Beach PS*]

At another point in the conversation the parents described how they thought that dealing with these issues was just going to get more difficult:

...[not] at that point yet but I imagine it will be harder as they get older, trying to continue keep that line of communication open about all this sort of stuff.

Yeah, the digital era [*Female parent 1, Beach PS*]

Yeah and bullying. It's massive, huge, embarrassing. So, I guess that something else you want to protect them from [*Female parent 2, Beach PS*]

Parental concern was a salient feature of the discussion, and both teachers and parents saw Years 5 and 6 as being an important time to impart the messages that would prepare them for the changes that high school would bring. Such changes included greater access to the Internet, access to their own phones, a greater need for acceptance from peers and more use of social media. Teachers and parents wanted children to be educated enough so that they would not come to harm (or do themselves harm) once they got to high school.

Teachers' workloads changing in response to children's increasing use of technology

Teachers identified a change that was occurring their work. Students' access to digital technologies meant that not only did they have to teach digital learning skills, but they were spending more time mediating issues that had arisen with students' social use of these technologies. Their commentary revealed feelings of unpreparedness and anger for this change. Teachers spoke about parents expecting them to sort bullying issues that arose from children socializing online, they felt that the Education department did not understand this newly emerging dimension of their work. They also felt threatened by children's savvy with technology and social media.

If you push your kids online for learning they're also going to be more online for socializing, and that has repercussions [*Female teacher, West PS*]
 I think it'd be good if the department recognized the need for development in that area [*Female teacher, West PS*]
 Especially with the question of 21st century learning [*Male teacher, West PS*]

But there's no guidelines to tell us what we should be teaching the kids.
 We're making it up out of our own common sense [*Female teacher, Beach PS*]

I think the role [of the teacher] is changing. But I think part of it is now we have to try to, I guess, educate them on online activities and digital technologies. But we don't all have the expertise. Like I guarantee probably half of my kids in my class know more about IT and social media than I do. So, to be honest I don't – as a teaching fraternity – overall well enough equipped to deal with it, especially how fast it's all learning and changing [*Male teacher, West PS*]

The newly porous boundaries between home and school

Teacher concerns about their changing workload also connected to the subtheme about the changes in the boundaries between home and school. The boundaries are becoming more porous and both parents and teachers have worries about the Internet extending schoolyard bullying into the home and that with their children on digital devices it was harder to escape.

Yeah but what's happening is the parents are saying that bullying is continuing at school from what's happening on a website, whatever they use...[*Female teacher, West PS*]

They're basically – that sort of thing is bringing home the schoolyard bullying into the house and it's no longer a schoolyard, it's now more – like every day constantly, which is worse than the schoolyard [*Female parent, Lake PS*]

A new 'digital era'

Connecting all these changes was the overarching theme of a societal shift to a 'digital era'. It is this shift that was causing the concerns connected with the subthemes detailed above. Both parents and teachers believe that the use of technology will continue to increase in the future. Due to this increase, parents saw the need to prepare children for this future, but weren't comfortable with all the repercussions and risks associated with having an online life, as this exchange between two women at Beach PS shows:

I think it's easier for, like, say my age, my generation. When I was 18, 19, 20, partying there was none of this. So that's why I think I'm lucky to have probably a positive one [digital footprint] to start with but if I was a bit younger then there's that potential. There is that window of maybe not so positive stuff out there. [*Female parent, Beach PS*]

It's hard for young people today as they go through what we all went through of kind of boundary pushing and experimenting. [*Second female parent, Beach PS*]

The whole world's watching really. [*Female parent, Beach PS*]

For teachers the rapid changes wrought by technology make it hard for them to keep up, as this teacher explains:

You get hold of how Snapchat works, and you sort out how they're using that and explain to them how it might work but then they're not using that anymore because something else just came out [*Male teacher, Beach PS*]

Parents were especially concerned about the lack of control that comes with the new digital era. They could no longer be sure who their children were communicating with, what their children could access and how to monitor this - as these examples from Beach PS make clear:

When we were growing up, like, you watched TV and it was PG and we could watch it and if it wasn't PG we didn't watch it, or G or whatever and our parents monitored that. We don't have – like, we do not have control. I'm not saying that we shouldn't be there to – but there is a lot of – like, we've two iPads and an iPhone and all these things that she could pick up in the house and I think we're all probably the same. They've got more access to that. [*Female parent, Beach PS*]

Yeah. That would be one of my concerns. I've got two teenage boys, so you can imagine what- You didn't have access to that stuff when I was a teenage boy. So how they think ---[*Male parent, Beach PS*]

I'm bad with technology but [my son] will go and he'll – da, da, da and he knows exactly what he's doing. Do you know what I mean? In that aspect it's very scary for me because I just don't know what he's looking at. Do you know what I mean? Like, friends and he tells me he's got good friends – and I know where he is all the time. It's not like he's wandering the streets or anything. I know where he is 24/7, but still it's behind the computer or behind the phone you don't know who he's socializing with. [*Female parent, Beach PS*]

Parental worries were often expressed in emotive language. Parents articulated fears, worries and concerns. While they could see the positive aspects of children's increased use of the internet, they were not entirely comfortable with all elements of this change. The shift to a more digital world was experienced as bringing with it things that were not knowable and uncontrollable, and this formed part of the concerns that they held for their children's well-being.

Discussion: reframing digital custodianship to include ethical principles

While the focus groups showed that teachers and parents knew about digital footprints and had a range of strategies to manage these, the discussion also made clear that there was fear about the myriad of changes being ushered with our increasingly digitally dependent society. Parents expressed consternation at what they did not know and could not control. Adults can only ever have partial or fragmented pictures of children's lives because children create their own social worlds and social relations (Valentine, 1999). It is therefore hard for them to know how to mediate children's online lives. Our research suggests that for parents and teachers there is considerable concern about this responsibility. The long-term implications are unknown, as are the full extent of children's activities, motivations and investment in their online lives. Parents feared for their children if things go wrong. For teachers the dilemma lies in giving students computers but being worried about the non-academic uses that students make of digital technologies. They felt unprepared for the responsibilities of helping children negotiate the relational aspects of children's online activities. While these fears are valid and well-founded, research with children suggests that they are aware of the

dangers of the Internet and have strategies to mediate these risks (Buchanan et al., 2017; Livingstone et al., 2010).

Given the emotion in this area, the rapidly changing cultures of digital participation, and the increased ubiquity of digital technologies we proffer the use of an established ethical framework to help teachers and parents in this gatekeeper role. We have chosen to use the ethical principles which underpin research with children as, like the process of exploratory research, the long-term effects and consequences of the ubiquity of digital technologies in children's lives is both unknown and unpredictable. The work of Southgate et al. (2017) shows that the ethical principles underpinning research have as their basis several long-standing and recognized documents such as: the Nuremberg Code; the World Medical Association's Declaration of Helsinki; the Belmont Report; and human rights frameworks such as the Convention on the Rights of the Child. In the *Ethical Research Involving Children* [ERIC] report, Graham et al. (2013) have distilled this body of work down to the core ethical principles of respect, benefit, and justice. These principles can be used as a way of thinking through the implications of helping children manage their digital lives. We shall demonstrate their utility for this purpose by explaining their meaning and the types of considerations that can be used when working through the appropriateness of children's online activities.

Using the ethical principles of respect, benefit and justice to consider children's online activities

Within the ERIC framework, respect for children is defined as taking seriously considerations of: 'who the child is; what cultural context they are living in; and, how culture shapes their experiences, capabilities and perspectives' (Graham et al., 2013: 15). When applying this to consideration of children's online activities, respect means understanding that children have agency in both their on and off line worlds (boyd, 2014; James, 2009), and that there is a difference between children's and adults' perspectives about the Internet and that respect would mean involving children in conversations about the Internet and its governance (Facer, 2012; Livingstone and Third, 2017). Respect would mean seeing children's online socialization and recreation as valuable because they value it, and that such activity is an essential part of children's participation in digital cultures of their own making (boyd, 2014).

The next principle in the ERIC report is benefit. Benefit consists of two components: non-maleficence and beneficence; non-maleficence means doing no harm, and beneficence refers to actions that promote well-being (Graham et al., 2013). By way of example, applying

the principle of non-maleficence to internet-based technologies means asking serious questions of technologies that surveil children, collect data about them, and are used to modify children's behaviour. Lupton and Williamson (2017) inform us that children are 'datafied' in numerous ways; various methods are used to surveil and monitor factors as diverse as appearance, growth, development, health, relationships, moods, behavior and educational achievement. Data is collected and stored on commercial platforms that have a profit motive for their involvement (Williamson, 2017b). This data generation and collection has been termed 'dataveillance' (Lupton, 2016). Dataveillance, and the internet-connected devices and apps that enable this need to be scrutinized for the potential harm that such technologies can cause. Of concern is the ability of particular apps to compel or elicit reward-seeking behaviour in children (Williamson, 2017a).

The potential for harm is not the only consideration. The benefits of online participation also need to be considered. What online activities promote children's wellbeing? Those that allow them to participate safely and positively in their online worlds (boyd, 2014); those that help them to build a positive digital footprint (Buchanan et al., 2018); and activities that allow children to build digital capital and make productive and generative (rather than passive) use of the Internet (Diogo et al., 2018; Dolan, 2016; OECD, 2016). Drawing on the principle of beneficence, it can be seen that children hanging out online is not as dangerous as some discourse suggests and the shift in the geography of childhood from the privacy of the home (Facer, 2012) to participation in the 'networked publics' of online spaces (boyd, 2014) is not to the detriment of childhood.

'Justice ensures children are treated fairly and equitably. This includes attention to power imbalances, and issues of distribution of benefits and burdens, and inclusion and exclusion' (Graham et al., 2013: 17). The ethical principle of justice, in this context, requires attention being paid to the power differences between adults and children and the way that power is exercised in the decisions made on children's behalf about their online activities and the access that they are granted to this. According to Graham et al. 'respectful listening to children's views, giving due weight to these and responding to what they have to say is part of facilitating just outcomes' (2013: 17). Just outcomes also mean finding a balance between the benefits (such as the development of valued knowledge and skills and a positive digital footprint) and the burdens (such as mitigating the risks) of online activity, and such outcomes also mean ensuring that equity of access to not just the internet, but the knowledge, skills and practices that enable the development of digital capital.

Graham et al. (2013) make clear that the ERIC framework of respect, benefit and justice ‘is not intended as a procedural document so much as a broad framework and a tool for generating reflective dialogue’ (p. 3). The ERIC framework uses well-attested ethical principles to develop a reflexive approach to thinking through the ethical complexities that come with mediating children’s digital participation. With the growing impact of digital technologies such ethical thinking tools are needed to extend the way that we evaluate children’s digital activities, particularly those that have the potential to create digital footprints; with the contingent longevity that renders them either a future liability or asset. This ethical framework also offers a way to discuss these issues with children themselves and to help them develop ways of negotiating the online space. Based on the principles outlined in the framework such discussion should feature respectful dialogue, with an understanding that online activities and participation in virtual worlds hold importance for children (boyd, 2014; Donkin et al., 2015).

Conclusion

Parental and educator apprehension about managing children’s digital lives was evident in the discussions analysed here. This study shows that as society is becoming more technologically dependent, both parents and teachers hold fears for the children in their care. They feel underprepared for the role of being digital custodians. Yet, one mother from Beach PS said, in response to the issues that they were worried about, ‘I guess it just comes down to trust’. As a tool for generating this trust we offer the ethical principles of respect, benefit and justice. These can be used to evaluate the benefit of children online activities and as a starting point for a dialogue with children themselves. While this study was based in a small geographic area, Flyvbjerg (2006) makes clear, a small sample size does not invalidate such findings. The concerns of those we spoke to reflect broader anxieties about children and technology (Facer, 2012). Rather than rehearse debates about how real the perceived dangers are, we seek here to acknowledge that for parents and teachers the concerns are well founded and have proffered a discussion of ethical principles as a way forward. Digital ethics need to be integrated into our collective norms of digital participation (Luke et al. 2017) and the ERIC framework offers a starting point for this necessary discussion and deliberation about what children are doing online. Teachers and educators can use their roles as custodians of children’s online lives to help children develop these necessary digital ethical skills while they help to manage their digital footprints and online lives.

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