

RESEARCH

Parents' Role in Supporting, Brokering or Impeding Their Children's Connected Learning and Media Literacy

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How do parents and carers approach the task of bringing up their children in the digital age? What is their vision of their children's future and that of the wider society? Most importantly, how are parental expectations, and expectations of parents, designed into learning opportunities for children, if at all? In this article, our focus is on how children gain media literacy in a range of non-formal sites including after school clubs, digital media learning courses, makerspaces and, of course, the home.

Keywords: Digital Parenting; Parental Mediation; Connected Learning; Media Literacy; Everyday Life; Digital Media Learning; Future Imaginaries; Makerspaces

Each site gains particular significance through its relation – imagined and practical – with school, the site of formal learning with and through digital technologies. But as advocates of open literacy argue (Hartley, this volume), the school often implements the most instrumental version of media literacy, insofar as it is taught at all (Polizzi and Taylor, 2019), not least because of the normative pressures set by government education policy (Selwyn, 2014). Meanwhile, there is ample evidence that children's spontaneous, interest-driven and informal opportunities to engage with digital media technologies result in more diverse and more actionable forms of knowledge (e.g. Blum-Ross, Kumpulainen and Marsh, 2019; Erstad, Gilje, Sefton-Green and Arnseth, 2016; Ito et al., 2013; Marsh et al., 2017). These are often enthusiastically embraced and valued by children, though equally they can be often regarded with ambivalence by adults (parents and teachers, also policy makers) who are uncertain as to their future benefit (or, as they might see it, their future payoff).

The starting point for our inquiry is that, curiously, both research on and provision for learning sites outside the home typically focus on what the child does in the site as if they arrived there by magic, return afterwards to nowhere, and never talk about or follow up on what they learned in the site with their parent(s) or caregivers at home. We understand that, from the point of view of an educator, it can be hazardous to make assumptions about the parents' role, both because parents are not within their sphere of control and so, frankly, may not act as desired and because parents are unequally resourced and so to build their contribution into educators' learning plans is, in effect, to build in inequities in outcomes. On the other hand, from the parents' perspective, the sense of being on the outside of their child's learning, tacitly or explicitly rebuffed by educators, and seemingly unvalued for what they can and do offer is frustrating to say the least. As the first author observed at the end of *The Class*, an ethnographic study of a year in the life of a class of thirteen year olds,

"It perplexed us that neither the school nor the families could imagine what goes on outside their immediate gaze, leaving young people to move from home to school and back each day without the adults responsible for their opportunities really seeing how their lives do or could better fit together" (Livingstone and Sefton-Green, 2016, p. 253).

The irony, then, is that while parents could be well placed to support more creative, child-centred or alternative forms of knowledge about digital media than can be squeezed into a crowded school curriculum, they are ill-placed to help democratise that knowledge. This is because, once such knowledge (however

creative or initially unconventional) gains official recognition (whether from school, employers or policy makers), the middle class parents may rush to maximise such learning as part of their “concerted cultivation” strategy, however tacit (Lareau, 2011), thereby exacerbating pre-existing knowledge gaps (Livingstone and Sefton-Green, 2017).

Our project, ‘Parenting for a Digital Future’ (in press, 2019), took up this puzzle, seeking to understand whether, why and how parents conceive of digital media as playing a pivotal role in their children's learning and development and how they act in consequence as they attempt to prepare their children for an imagined future (Livingstone and Blum-Ross, in press). For this project, we interviewed over 70 parents from highly diverse backgrounds living in and around London, and conducted participant observation at digital media and learning sites as well as interviews with educators and children. We also conducted a nationally representative survey with 2000 parents to understand the extent to which our qualitative research was representative of British families. We later took the insights from this project into new research on the role of parents in makerspaces for young children, to examine how the design of learning sites can support or impede children's learning and digital literacy (Blum-Ross, Livingstone and Mustain, 2019; see also Marsh et al., 2017 on the potential of makerspaces for children's creative digital literacies).

In this article, we reflect on these projects and their resulting insights in order to draw out the implications for the multidisciplinary inquiry into media and digital literacy. We are mindful of this volume's specific focus on open literacy, and intrigued by the potential for productive intersections between open literacy and the research framing of our own work, namely that of connected learning. Building on the foundational research by Ito et al. (2010), the MacArthur Foundation-funded Connected Learning Research Network has, over the past decade, hypothesised that learning is best enabled when it is interest-led, peer-supported, collaborative and production-oriented rather than curriculum-led, teacher-directed, individualistic and test-oriented (see Ito, Gutiérrez et al., 2013). The network has hypothesised further that, although digital media technologies are not in principle necessary for connected learning, their affordances (sharable, remixable, networked, etc.) can make such learning more accessible, more diverse, more readily collaborative, and more strongly linked to young people's agency and interests.

Where do parents fit in to children's digital learning?

Many researchers are now exploring parenting practices with digital media in the here-and-now. In such research, by far the majority of studies focus on parental mediation of children's internet use, and the majority of this, in turn, focuses on parental actions to minimise risk and ensure safety rather than, crucially, actions to facilitate learning and maximise digital opportunities (Livingstone, Ólafsson, Helsper, Lupiáñez-Villanueva, Veltri, & Folkvord, 2017). But in our research we have found this to be just a subset of parental actions, albeit high on the parenting and public agenda of anxieties in the digital age. Parental mediation of children's digital safety can be regarded as concerned with “hygiene factors” – matters that need to be taken care of in order that a space is not toxic but, instead, conducive to beneficial actions. The deeper question for parents and, ultimately the bigger challenge, is figuring out what are the benefits that children could gain from digital opportunities if safety was taken care of. After all, as we heard from parents over and over again, though the risks worry them, they have bought technology to fill their homes, and they enrol their children in schools with the latest kit or afterschool clubs to learn coding – in accordance with their means – for positive reasons.

To uncover these, we asked parents to project forward up to 20 years to imagine the future when their children are grown up, to see how they imagine the future, especially as this contrasts with memories of their past childhood, as such imaginaries shape and give meaning to their present actions. Few parents state as their hope that their child should be media literate for the sake of it. But they do increasingly recognise that the more that digital media mediate everything in society, the more vital it is that children—and they as their parent—are informed about and critically engaged with digital media, so that children are able to judge how digital media can be most effectively accessed, what's useful or misleading, when they can be trusted, or what commercial or political interests are at stake. In other words, parents are becoming aware that media literacy is no longer a matter of simply engaging with the media but of engaging with society through the media.

Additionally, and perhaps because the future in general is so hard to envisage, leaving a gap easily filled by science fiction imagery, over and over again we also found that ‘the digital’ provides a crucial lens through which parents visualise the future, crystallizing their hopes and fears for their children in particular ways (Livingstone and Blum-Ross, 2018). In other words, parents are coming to view their child's orientation to and knowledge about technology as an indicator of their preparedness for an unknown and uncertain

'digital' future. This adds an often-anxious intensity to otherwise mundane everyday activities, with parents often judging themselves harshly as they seek both to protect their children from presumed 'screen time' harms and yet to ensure their children 'keep up' with the latest digital opportunities to learn, code, create or gain crucial skills for those future jobs reportedly not yet invented.

As parents struggle with the seemingly contradictory injunctions to embrace and to resist or police and monitor children's digital media engagement, the potential for public policy actors (including their children's teachers) to support them is evident to us, though curiously little provided in practice, as we noted at the outset. When we surveyed parents find out who they turned to when they had questions about their family or child's digital media use only 17% said they asked an educator or health professional, in comparison with 34% of parents who turned to these professionals for non-digital concerns. Yet, perhaps ironically, both for digital and non-digital questions over a third of parents said that they searched for advice and support online (Livingstone, Blum-Ross, Pavlick and Ólafsson, 2018). Despite parents' lack of support and repeated tales of feeling 'overwhelmed' and 'clueless,' they are actively denigrated by a critical media and public, who excoriate parents for using digital media as an 'electronic babysitter' or conversely for being 'that' parent on their phone at the park (Kamenetz, 2018).

Academic research, too, tends to simplify or underplay the contribution parents do or could make to their prospects for their children, with most literature on parental mediation focused on how parents should limit children's media use. In research on connected learning, it has been recognised that parental 'brokering' activities (Barron et al., 2009) mean that some "families are supporting learning at home in ways that are not exclusively focused on competitive achievement" (Ito et al., 2013, p. 25). Still, the potentially iniquitous role of digital enrichment activities – generally brokered and supported by parents – is more often flagged as problematic evidence of example of 'concerted cultivation' (Lareau, 2011) and thus as a mechanism for reproduction of advantage and disadvantage. Indeed, for many educators, parenting is a major source of social inequality (Carolan & Wasserman, 2014; Gillies, 2008), insofar as better resourced and more skilled parents are better equipped to take up innovative opportunities when available, including digital media opportunities (Livingstone et al., 2017).

Beyond a deficit view of parents

For educators and policy-makers, the popular (and expert) narrative of parental 'deficit' has two dimensions. On the one hand, parents from non-dominant communities are configured as a site of intervention, described only in terms of what they lack and are unable to do (Alper, Katz, & Clark, 2016), despite ample evidence of the ways in which parents from all backgrounds support their children in learning and creating (Katz & Levine, 2015; Warren, 2005). In key ways, we suggest that this has led to observers (from researchers to policy makers) to underestimate the positive contributions that parents can make to their children's learning, including helping them prepare for and consolidate learning gained in formal and non-formal learning sites.

On the other, the popularity of the 'digital natives' rhetoric, even though it has been substantially critiqued (Helsper & Eynon, 2010; Prensky, 2001; Thomas, 2011), means that parents are seen by educators (or assume themselves) as 'digital immigrants' unable to support their children in the new digital world. Even if this were once valid, it now fails to capture the generational shift in which today's parents have, first, themselves grown up in the digital age and, second, often use digital skills in their own lives, even when their jobs may not seem to require this. One mother in our study, for example, though precariously employed as a home health-care assistant, a job not requiring of digital skills, nevertheless had to log on weekly to a government website to digitally record that she was searching for work. This and many such similar stories demonstrate how parents have, in one way or another, acquired digital skills that that could productively scaffold their children's learning.

Thus there is more work to be done to understand whether and how parents act as media mentors, brokers, co-learners, resource providers and more so as to help children develop the interests and values that may undergird their later pursuits and open up productive pathways to learning. In our research, we saw parents grappling with the pressures and contradictions of incorporating digital media into their lives – and their vision of the future – in various ways. Examples from our fieldwork include the following:

- 'Geeky' families, from across the economic spectrum, where digital activities and play are a source of shared enjoyment and learning.
- Parents with children with special educational needs, including Autism, where digital media are both the source of conflict and worry and a possible route towards valued social skills or future employment.

- Parents and families who have romantic visions about digital media offering their children future opportunities to 'realise their dreams' and 'express themselves.'
- Parents who are highly anxious about digital media including 'screen time' for young children and social media and video games for older children, and who thus (try to) significantly restrict their children's access to digital media, even when sometimes they are heavy media users themselves.
- Parents who take instrumental approaches to their children's digital futures, signing them up for coding classes or attending makerspaces to learn '21st century skills.'
- Parents who express dystopian or competitive visions of the digital future, doing what they can to shore their children up to help them 'get ahead.'
- Only a handful of families articulated the kind of social justice or civic imaginary envisaged by the Connected Learning framework. This absence can either be read as justifying the focus on civic interventions outside the home, or as providing evidence that more engagement of parents is needed.

There are, of course, issues of equity at stake here. While parents from non-dominant backgrounds are aware of the importance of their role, middle class and 'creative class' (Florida, 2014) parents are often more reflexive and persistent in playing this supportive role – even where they sometimes go to extremes to achieve this (Dermott & Pomati, 2015). However, while middle class parents are often better positioned to ensure their children's interests and learning articulates with the norms and expectations of school (Lareau, Adia Evans, & Yee, 2016), this does not mean that poorer or more structurally-marginal parents do not devote considerable energy to their children's informal learning opportunities. For example, one mother – a child-minder with four children living on a low income – explained to us how she invested a disproportionate amount of time and money into ensuring her children gained experience with digital technology at home, saying "I do encourage them [with technology], because this is their future".

Indeed, proportionate to their sometimes extremely limited resources, we found parents from all backgrounds going to great lengths to resource and support children's digital media activities at home or enrichment activities outside the home in an effort to 'keep up' or 'catch up'. For example, one health-care assistant mother was taking care of two daughters on her own and spending a significant proportion of her below poverty-level wages to send her daughters to extra-curricular classes and buy an intermittently functioning desktop computer. She explained that, "technology is growing, yes, so they have to learn how to [use it]." But at the same time she worried that the girls would come across inappropriate content and, echoing 'expert' advice (although she could not source it to its origin with the American Academy of Pediatrics; Blum-Ross & Livingstone, 2018), she added that "in the news I heard the [scientist] say more than two hours... it's not good sense."

Trying to parent the digital positively

So parents move between and among different stances towards digital media, in many ways broadly positive about the educational benefits while they retain concerns about the impact of digital media on their individual child and on their family life. Thus approaches to digital media are inconsistent, even within the same family. For instance, one middle-income mother of two described:

We kept the tsunami away for a very long time, but then literally everyone in... secondary school had a phone, there was no exception, and we were shocked and astonished, but by half term we gave in and gave her my husband's old phone.

While lamenting the 'building pressure' from her daughter's peers (and their parents) this mother was also forced by her more technology-enthused husband to consider some of the potential benefits. He, instead, described coding as "the Latin of our era" and hoped that both his children would learn coding "languages that might unlock opportunities." At the same time, this seemingly technology-averse mother was herself a parent blogger, narrating her struggles over screen time on a digital outlet of her own (Blum-Ross and Livingstone, 2017). In the majority of cases, those parents who saw their main task as implementing screen time rules and policing use became locked into a more hierarchical relationship of authority. And, insofar as these rules often were untenable, they also became anxious or guilty at their parenting 'fails.'

If these families represent disconnected as much as connected parenting (Livingstone and Sefton-Green, 2016), in contrast a small but important subset of 'geeky' families were able to create a peer dialogue of digital exploration between parent and child. These families evinced "an intense commitment" to "learning to navigate esoteric domains of knowledge and practice and participating in communities that traffic in these

forms of expertise. It is a mode of learning that is peer-driven, but focused on gaining deep knowledge and expertise in specific areas of interest" (Ito, Horst et al., 2008, p. 28).

Our national survey confirmed that digital media bring families together – through television and movies and playing video games (favoured by fathers). Families turn to digital media to keep in touch, from calls, emails and texts to newer media like messaging apps and video chat. The latter are gaining in popularity, particularly amongst parents of younger children, whereas parents of teens are more likely to use social media to keep in touch with their children. Further, of the seven activities we asked about, to enable children's learning at home, parents reported an average of two. Parents of children in the middle years (5–12) do most, as do middle class parents. But a third of parents from the lowest socioeconomic group said they did none of them. The findings further showed that (Livingstone, Blum-Ross, Pavlick and Ólafsson, 2018):

- Most common (half of parents) is using the internet to support their child's learning or schoolwork in some way or other. This is especially the case for parents who themselves use the internet frequently, and for middle-socio-economic status (SES) more than lower SES parents. It is much less common among parents of 0–4 year olds, though still a quarter say they do this. Almost as common (four in ten parents) is watching a video to support their child's learning.
- Interestingly, around four in ten parents say that they themselves use the internet for their own work or learning – this is strongly stratified by socio-economic status.
- There are few gender differences – for either parent or child. Parents do more with 5–12 year olds than with either toddlers or teens.
- Older parents use the internet to support their own work and their children's learning but younger parents use it more to download an educational app or game. Higher SES groups use the internet for more activities than lower status groups.

While some families are engaging in creative activities together, this is the most uneven, with only high-income families likely to have created music, photos or videos together. However, although the consequent opportunities to learn at home are far from solely the province of privileged families, it is also clear that substantial inequalities persist in both resources and outcomes.

Indeed, we interviewed some parents for whom digital media had become a space of shared enthusiasm, learning and even joy. One middle-income tech worker mother described how she had bought her son a Kodu programming kit, and the two would happily exchange tips and tricks for their digital creations. While these parents had found a language of connected learning to share with their children there was also a (sometimes) inadvertent antagonism with formal schooling. For some parents and children, with their growing digital confidence, schools and teachers were stuck in the past, or as one middle-income father described, "even the way we teach is very Industrial Age. We're living in the Information Age and [yet] we're still using notebooks, handwriting." This has implications for connected learning design, in that helping youth navigate systems (Ito et al., 2013) requires connected educators and parents to acknowledge and prepare for the reality that fostering some forms of connection may come at the expense of others.

These conflicts are embedded within both parents' and educators' narratives. Neither has fully reconciled their account of the role of digital media in bringing about a desired future (Blum-Ross and Livingstone, 2016b). Are the instrumental/competitive imaginaries compatible with the romantic/creative? And what is the role for parents in bringing about alternative or civic visions, given these may not be foremost in their minds when they are preoccupied by the particular needs of their individual child? Thus both at school and, perhaps more surprisingly, in non-formal digital media and learning contexts, educators struggle to recognize the strengths and values that parents present to supporting and extending the learning opportunities they provide.

Perhaps it is because of these tensions, uncertainties and lack of support that our parent survey found that, overall, parents are broadly, but not hugely positive about technology, judging that the benefits to their child are likely to outweigh the harms. This is particularly the case for benefits in terms of learning about technology, supporting school learning, pursuing hobbies and interests, being creative and expressive, and preparing for future work. They are a bit more doubtful, but still not negative overall, about possible benefits to their child in their developing relationships with family or friends, or learning social and emotional skills.

Parents hanging around, messing about and geeking out in makerspaces

Developing our interest in parenting, we took forward the above ideas through our participation in the international 'Makerspaces in the Early Years' project, led by Jackie Marsh at University of Sheffield. MakeEY was a 30 month project (2016–2019) funded by the EU Commission's Horizon 2020 programme. It brought

together researchers and educators from Australia, Canada, Colombia, Denmark, Finland, Germany, Iceland, Norway, Romania, South Africa, UK and the USA. For our part, from January 2017–September 2018 we made multiple visits to three museum makerspaces in the San Francisco Bay Area, seeking to understand how parents support children to gain the building blocks towards digital literacy by engaging in hands-on making and tinkering projects (see Blum-Ross, Livingstone and Mustain, 2019; Livingstone, Blum-Ross and Mustain, 2019).

These parents, many of whom were highly digitally skilled (the SF Bay Area encompasses Silicon Valley, thus many families work within or adjacent to the technology industry), occupied a variety of different supportive roles when they accompanied their young children. We sought to map out these different 'roles' played by parents, in part inspired by Barron et al. (2009) who determined that parents play distinct roles as 'learning' partners in helping children develop technological skills. We were also interested in exploring the idea that families act as 'dispersed learning systems', especially since even when they lack subject-area knowledge (and some of our Silicon Valley parents did lack such knowledge), parents are knowledgeable about the interests, needs and abilities of their own children (Brahms and Crowley, 2016). They are also keen to build on this knowledge, scaffolding their child's learning in ways likely to be productive in a digital age. As one mother explained to us:

"Generally his world is playing with balls and trucks and cars. It's really hard for me to get him engaged in creative or artsy things. He doesn't like to draw. Whenever I try to get him into that sort of more creative, design or anything, I try to incorporate cars or planes or balls. So I thought this would be perfect... But I love how innovative it is from like drawing the picture and then using the tablet."

Another mother echoed the language of open literacy in saying,

"But honestly, we are more like, we want to give a more organic learning." A father agreed too, saying of his child, "And it's not about learning, the effort around learning. It's really about something where you can experiment on your own level."

We were also mindful of more negative discourses surrounding parents' roles, such as "free-range" or "helicopter" parents, which simultaneously critique parents for being too hands-off or too hands-on. Or indeed, the new folk devil, "distracted parents," who are characterised by allowing their own screen time to interfere with attention meant to be spent on their child. Some of these discourses were salient to the educators, who were tempted to criticise parents either for treating the makerspace as a babysitting resource while the parent took a break, or for being too hands on and controlling, and not allowing the child a chance to experiment, tinker, and learn through their own mistakes.

Particularly overlooked by educators was the work that parents did in connecting their child's learning experiences across sites, helping them make sense of the makerspace activities in relation to other parts of their lives – for instance, when they got home (perhaps displaying a drawing or craft object, inviting them to tell a family member how they made it, buying similar craft materials or digital resources to allow the child to tinker at home, or preparing the child for their next visit.

Although we recognised many of these stereotypes in parents' behaviour we also saw the multitude of different ways in which they moved between one role and the next – indeed especially so if they had children of multiple ages with them. These roles included:

- *Babysitting*. These parents sat at the back – there for the basic physical safety of their child but not following or engaging in the making activities. While one might feel judgemental of these parents from afar, when we observed (or parents volunteered) what they were doing we saw parents nodding off from exhaustion, breastfeeding younger children, checking time sensitive work emails (having come to the museum during their own work hours) and beyond.
- *Supervising* when parents stood back and carefully observed – not involved in the activity but not turning their attention elsewhere either (e.g. to their phones). Where at first it seemed that some parents were 'babysitting' it was actually a hands-off yet highly engaged form of encouragement. For some, this was part of a parenting philosophy in which the child should lead the activity for example one mother of a six year old said:
- "If I'm with him, he will want me to help him. So I often try and just leave him alone. I want him to feel challenged when his mind doesn't know how to do something, or when he thinks he might

not be able to do something. If I'm not there, and he is forced to figure it out, then that's where the magic happens, and that's where growing happens."

- *Cheerleading* was perhaps the most common role for parents – these parents praised their child's accomplishments by taking photos or videos and cheering them on, often loudly, sometimes at the cost of the collaborative or process-led learning ethos attempted by the educators.
- *Collaborating* is a more hands-on approach. We watched a lot of parents in the makerspaces physically assisting in the creation, or collaborating with their children on what the design would look like once completed. In practice, we noted that some collaborative parents were tempted to 'take over' for their children. This is a tendency that facilitators tried to shift into 'parallel play.'
- *Parallel play*, a term from early childhood education which denotes when children play with separate materials but side-by-side, was also a common practice, in some cases facilitators explained that they would purposefully give parents their own set of materials in order to facilitate this, or encourage a sense of competition between parents and children.

Rather than jumping to judge some of the parents – especially those being too hands-off or those 'taking over' – we have instead tried to understand how parents may be tailoring their actions (or inactions) according to their own understandings, skills and values, and needs of their children. One overlooked contribution of the parents is the work they did in connecting their child's learning experiences across sites, helping them make sense of the makerspace activities in relation to other parts of their lives. Parents' knowledge of their children, knowing when to push, and what might motivate, were also complemented by their physical intimacy and ability to help children when needed. However, sometimes that intimate knowledge could also get in the way of parents' ability to see when they needed to step back.

Educators, who have greater knowledge of the mechanics of making itself, can thus work in tandem with parents' more intimate knowledge. In all we saw that parents often made reasoned choices as to which role they acted in over another. Their own experiences with their children informed these choices. Instead of seeing parents as merely too engaged or disengaged, we suggest that a typology of parent actions (rather than of individual parents because some moved across these categories) is helpful in providing reflections that can be shared with the facilitators to help develop new initiatives and support for parents in the future.

Conclusions

Reflecting on the emerging insights from our own project and others concerned with family life leads us to conclude that there are many ways in which parents can be better supported in their role in supporting and brokering their children's connected learning, and engaged with as co-learners alongside their children. We have found many examples of young people developing interests and passionate pursuits within, rather than in spite of their home-environment. Originating in parents' own interests, life stories or remembered childhoods, children's interest-driven learning can often be traced back to parental practices and imaginaries as well as their access to resources, education and digital expertise.

But insofar as researchers tend to position the family as the structure (enabling or constraining) against which young people act as agents of their own future, this obscures the role of parents as themselves agents in positively shaping their and their children's prospects. This in turn tends to result in a missed opportunity to engage parents positively, a problem compounded by the common perception among researchers, policy makers and practitioners that parents are hard to reach. Thus while parents are often digitally skilled and creative in their own right, and can mentor and broker their own children's digital media learning opportunities, outreach to parents is sometimes experienced as in conflict with parenting advice which dictates 'good parenting' means non-mediated activities (for example craft activities at home, outdoor sports or play) (Blum-Ross & Livingstone, 2016a).

Yet parents can be powerful sponsors of their children's interests, and a key resource for making sure connected learning reaches all of the sites of children's lives, and that episodic connected learning experiences have lasting impact. This is also particularly important given the increasing recognition that connected learning needs to be culturally relevant, inclusive, and connected to other opportunities to be impactful (Ito et al., 2013). Thus while children's interests may be sparked through school, peer or online spaces, parents often play a key role in enabling and sustaining these activities over time, for it is parents and not educators who are positioned to be there to sustain this interest into the future.

We are encouraged that in recent years we have observed growing efforts to reach and connect with parents (see, for example, Roque, 2016), allowing them to become more focal to and vocal within wider frameworks for policy and practice, including connected learning sites. Further steps might still be made,

however, to increase sensitivity to the presence of parents in and around digital media learning sites – dropping off and collecting their children, suggesting interests to their children and potentially extending competencies learned in the sites once back home. In this way, connected learning could become more productively a multi-generational effort.

It is worth noting, however, that although ideas of openness, connections, collaboration and networking sound positive, our empirical work has also revealed ways in which participants – children, also parents and educators – on occasion value what we have called “positive disconnections” (Livingstone and Sefton-Green, 2016). After all, connections can be coercive or surveillant, and at times learning is best conducted away from scrutiny, or in spaces whose boundaries are under the learner's control. If the opposite of connected learning is disconnected learning, what is the opposite of the concept of open literacy? Beyond the obvious critique of closed forms of literacy (Hartley, this volume), might there be occasions in which learners might positively favour closed forms of literacy? Although such a possibility is rather different from finding in *The Class* that children sometimes valued positive disconnections to provide freedom from the demands of others (as, indeed, did parents and teachers), it is interesting that, also in *The Class*, we did find some such desires on the part of learners. For at times families wanted to know what just knowledge is worth striving for, and whether it will bring benefits, and what, practically, they need to do to achieve this. This, we suggest, reflects the heavy burden of uncertainty associated with growing up what Ulrich Beck (1992) has called the risk society. After all, to urge risk-taking, experimentation and uncertain outcomes for young people, especially those in disadvantaged circumstances, may in itself be too risky for those facing a precarious future.

Structural responses are therefore vital. These surely include, we have argued, the expectation that schools and other educational institutions should recognize the contribution of parents in educational settings. After all, parents play a key role in enabling children to access educational resources and it makes sense that they should be offered information, understanding, expression and routes for possible complaint, instead of being so often left in the dark, feeling themselves not knowing the right questions to ask or, more simply, on the wrong side of a closed door. This will not, we might add, stop parents doing what they can, and what they think best, at home. So educators would be wise to anticipate that parents will try to foster their child's learning across sites, including at home, and design convenient and sustained opportunities for parents to engage with and support their child before, during and after their participation in particular educational opportunities. Indeed, not only will parents often try to help their children but they can – and are likely to try – to learn themselves from the educational setting directly, or to learn via their child.

In calling for a greater role from educational institutions, we are aware of the irony that we – along with most parents – still have hopes of school despite its being so curriculum-bound in its nature and instrumental in its practice, that it is hardly conducive to the creative, collaborative and alternative conceptions of media (or open) literacy than a connected learning framework favours. Yet the vast scale of the state budget invested in school compared with out of school learning, the substantial training and resourcing available to teachers compared with other educators (even though schools remain chronically underfunded), and the many hours that children spend in school – all these factors combine to convince us that it would be a mistake to give up on school. Parents, persistently, turn to the school – trustingly, hopefully, yet often disappointed or even angry. Teachers believe in education and have hopes for students and their parents, even though they are often exhausted, frustrated and, yes, sometimes cynical. If one could only shift the focus to thinking of school as a community, and as located in a community that includes parents, informal learning resources, even some digital tech expertise, surely policy makers could reduce the pressure on schools to compete, and the doors could be a little more open, to the world, enabling greater interchange and a bit more child-centred, creative collaboration. Or maybe not. In which case digital technologies will become merely the latest means by which hopes were raised before neoliberalism dashed them.

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Competing Interests

The authors declare that they have no competing interests and that the research was conducted while both authors were employed by the London School of Economics and Political Science.

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