Your kids being Digital

A Guide for Digitally Connected Families

Mal Lee, Roger Broadie & Peter Twining • 2018



The aim of this guide is to help parents like you to support your child to use digital technology effectively in their learning outside school. Our desire is to help you address some of the concerns many parents have about their children's sometimes seemingly insatiable use of digital technology.

Vitally it is also about using the digital technology wisely to provide the children an apt and balanced education.

We are living in a digitally connected world and if you are reading this guide you are already probably aware of the importance of the digital in your child's life. While we cannot predict the future, it seems a fair bet that digital technology will in its many forms be central to all aspects of your child's future life, learning and work.

Many parents are rightly anxious about their children's use of digital technology:

- Will she be disadvantaged if she has limited access to digital technology?
- · When should she begin to use it?
- · How much is too much?
- · Is she safe?

This guide attempts to answer those and similar questions.



Fundamentally it is about how to help your child to thrive in a digitally connected world.

This is not just about your child's learning about digital technology, but more importantly it is about them learning with the digital technology and becoming effective lifelong learners. It is far more than developing digital proficiency and having the facility for more efficient and effective learning. It is about having a mindset, a mode of thinking, an expression of values, a set of ever rising expectations, an ability to draw on many connected elements, a way of learning and understanding how to learn, a taking charge of one's own learning, being able to network, to accommodate accelerating change, to continually develop, lifelong (Lee and Broadie, 2018 a).

It is about them 'being digital' (Negroponte, 1995), (Lee and Broadie, 2018a).

Naturally drawing upon that capability in near every aspect of their lives, learning and in time work.

This guidance is based on cutting edge research, that is listed by the authors (Lee and Broadie 2018b; Twining et al 2017). Where we refer to other research we have included a reference to it in the text. Full references are provided at the end of the guide for those who want to follow them up.

One of the key findings of the research — that has rarely been seen - is that there are remarkably similar patterns of use of digital technology by children across the world. Our evidence suggests that across the English-speaking world, and likely the globe the young are using and learning with the digital in much the same way — outside the school walls.

Moreover, children born into digitally connected families naturally grow their being digital from birth, and by the age of three will be demonstrating the attributes that go to being digital (*Chaudron, et.al, 2018*).

Another is that the total family – and not just the parent/s, play a critical role in growing and shaping the children's use and learning with digital technology. Probably for the first time in history the young know more about personal digital technology than their elders (*Tapscott*, 1998).

This guide asks you to reflect on your family's, and particularly the children's use of and learning with digital technology. While no one can foretell the future with any certainty we can, in better understanding what is happening around us and globally we can more effectively shape their learning for the years ahead.



You
can't
rely
on
schools

We focus on your children's use of digital technology outside school because that is where most learning with digital technology happens, not in the schools.

Schools worldwide have struggled to keep up with the accelerating digital evolution. Their aged organisational structures and practices, coupled with the desire by governments globally to control and micro-manage every school operation sees them lagging ever further behind the families' use of the digital (Deloitte, 2017).

The family as a small highly agile unit in charge of their affairs, have easily stayed abreast on trend to continually operate at or near the cutting edge.

In the last decade, with the release of the touchscreen mobile technology the age of those the using and learning with digital technology has plummeted.

Your child will have several years at home before they go to school, and this period is critical for helping them to thrive with digital technology, the family is the child's first and most important teacher.

Even when they go to school children only spend around 20% of their learning time there annually. In most schools, little of that time will be spent using digital technology. Most schools in setting their priorities don't regard growing the children's being digital, or having the digital underpin all learning as important as you do (*Lee and Broadie, 2018b*), (*Busteed and Dugan, 2018*). While the hype is often considerable the reality is another thing. While most schools in the developed and increasingly the underdeveloped world have what they believe to be the 'right' technology they not only don't trust the children to use it appropriately, but many teachers believe the mobile devices are harmful to the learning (*Busteed and Dugan, 2018*).



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and
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Schools globally have persisted with an approach to learning with the digital very different to that of the family and there are few signs of that changing.

Tightly controlled, highly structured, focused on class group learning, based on what authorities believe the young should learn, the formal approach will largely only be used by the young in schools, when compelled.

From a family perspective, most schools have not, and likely will not offer you direction or support in growing your children being digital (*Lee and Broadie, 2018b*). Indeed, few are likely to be interested in or understand how the kids use and learn with the technology outside the classroom. Only exceptional schools will value and build upon the learning with, and the creative use of the technology outside their walls.

Unwittingly, and still largely unseen the schools have lost their monopoly of digitally based teaching and learning, unaware of the lead role being played by the digitally connected families, and the many reasons why the families will continue to play that lead role.

Importance of the digitally connected families

Today the digitally connected family is the children's first and primary teacher with the digital. As soon as the child opens her eyes for the first time she will observe and learn from what the family does and says, including everything it does with digital technologies. The family members are the first role model for your children, and they will attempt to imitate all of you.

More and more families are becoming networked (Wellman et.al, 2008), or what we prefer to call 'digitally connected'. Such families share four key linked elements:

- the 'digital', that make it all possible, and which shapes the thinking
- the 'connected ', that links the family members to the networked world, and which allows both the nuclear and extended family to naturally employ the technology in all facets of their lives and learning
- the 'family' where all the children, the parents, the grandparents enhance each other's use of and learning with the digital.
- an informal, integrated, discovery, based approach that is driven by the learner's interests and undertaken in context – what Lee and Broadie (2018b) call laissez faire learning.



That lead role for digitally connected families is on trend to grow and strengthen.

Digitally connected families appear to have been successful globally in supporting their children's use of digital technologies.

The 65% plus (ITU, 2017) of digitally connected young have had their technology and connectivity funded by the families – not by governments or schools. When suddenly confronted around 2012-13 with their pre-primary children successfully using the new touchscreen technology they naturally and instinctively shaped its astute and balanced use. A read of the European Commission's studies (Chaudron, 2015; Chaudron et.al, 2018) on 0-8 learning in 23 countries, or the Erikson (2016) and Rideout (2017) studies of US families reveals the common sense, the balance, and networked learning brought to play by the families, and the limited contribution by the schools and government.

That lead role for digitally connected families is on trend to grow and strengthen.

The evidence suggests that digitally connected families 'instinctively' do the right thing. To quote Sanjay Sarma of MIT:

...your instincts as a parent are closer to the way learning ought to occur than what we subject students to necessarily in schools or colleges. So trust your instincts as a parent. That's what we have evolved for (Sarma, 2018).

Digitally connected families adopt what Frank Smith (1998) describes as the classic view of learning which involves being part of the 'clubs' you value. Your family being the first such club, followed by your friendship groups and then other groups of people with whom you share an interest and who you aspire to be like.

There is a considerable difference between in-school and out-of-school learning (*Twining, 2018*). In school the learning is usually teacher-directed, follows a curriculum and way of understanding defined by adults, is broken into lessons which cannot be extended when the bell rings, use only resources selected by the teacher and don't allow access to other 'teachers' who might be found on the internet.

Out-of-school learning is pupil directed, discovery-based, follows the child's interests not a set curriculum, involves a lot of trial and error, can continue for as long as the child wishes to concentrate, uses very diverse resources, particularly video, and allows children to connect whenever they need to, to

whoever they feel can help them progress their learning. There is a case to be made that this out of school approach to learning is considerably more effective than the approach used in school.

The key message is that you should trust your instincts, and trust your children in using the evolving digital technologies to enable them to pursue their interests and passions, and become effective members of the communities they value.

Appreciate that as a digitally connected family you are far better positioned than any school to grow your children's being digital from birth onwards, with strengths few schools can match (Digital Evolution of Schooling, 2018).

What we know for certain is that children without access to the new media will be disadvantaged

The Digital Divide

While 65% plus of the world's young are digitally connected (UNICEF, 2017), and the trend points to eventual near universal connectivity the reality remains that around 35% are not, and that the quality of network access still varies appreciably globally (ITU, 2017; UNICEF, 2017). Every nation has families that remain disconnected, and disadvantaged, educationally, socially and economically.

Twenty years ago, the Tapscott (1998) research prompted this observation:

What we know for certain is that children without access to the new media will be developmentally disadvantaged (*Tapscott, 1998, p7*).

Twenty years on we have a far better understanding of why that is so, and what digitally connected families globally have done, and importantly can do to assist lessen that divide. UNICEF (2017) noted:

Children and adolescents under 18 account for an estimated one in three internet users around the world (UNICEF, 2017, p1).

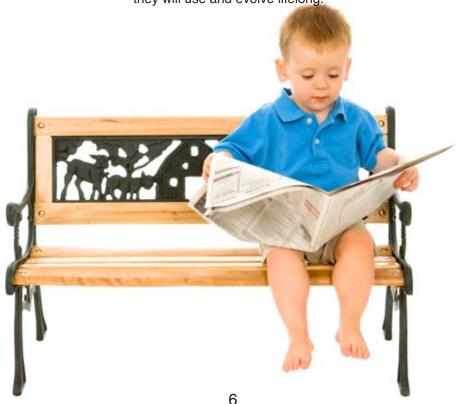
It importantly concluded:

Connectivity can be a game changer for some of the world's most marginalized children, helping them fulfil their potential and break intergenerational cycles of poverty (UNICEF, 2017, p1).

What we and likely you also know is that since the release of the iPhone in 2007 and the world's embrace of touchscreen technology the young have begun to normalise its use from very early in their lives. You've likely seen it with your own kids and their friends.

Research (Chaudron, 2015; Chaudron et.al, 2018; Erickson, 2016; Johanssen et.al, 2016; Rideout, 2017; UNICEF, 2017) and experiences globally point to the situation where children born into digitally connected families will likely;

- from birth naturally grow being digital unless prevented
- in the first year of life try to swipe the touchscreen
- by three readily operate touchscreen mobiles and tablets (Chaudron, 2015; Chaudron et.al, 2018; Johanssen et.al, 2016; Ofcom 2017)
- by the same age begin to exhibit albeit at an early phase, the
 attributes demonstrated by the young of the world in being digital, and
 will have adopted the *laissez faire* approach to learning with the digital
 they will use and evolve lifelong.



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A study involving eleven European nations, observed that...

Smartphones are the melting pot devices as they are very versatile in their use. They allow the children to watch videos, play games, send messages, take pictures, and make video-calls and ultimately phone-calls. In most cases, children use their parents' device equipped with free-apps in different context and different activities but recurrently for filling gaps in the day *(Chaudron, 2015, p6)*.

Ofcom (2017) noted that 42% of 3-4 year olds in the UK had accessed YouTube.

While the uptake varies globally the figures point to around 85% - 90% of children aged 0-7 in developed nations having ready use of a tablet, with over 40% possessing their own.

Children that don't have the digital connectivity are likely, as UNICEF indicates, to be marginalised.

It is little surprise then that many parents have chosen to provide their children ready, largely unfettered access to the gear from very early in life.

Supporting your children

Much in this you'll likely know – even if unwittingly – from observing and guiding your kids' and/or grandkids' learning with the digital, and from your own learning with digital technology.

The key is to continue doing what you have been doing so successfully, building on your own experience and common sense.

Tellingly most of the worlds digitally connected young, and their families — with no advice from any expert or government - adopt the same approach to learning with the digital — what Lee and Broadie (2018a) call laissez faire learning. This seems to be true regardless of nationality, culture, gender or socio-economic standing.

This approach is based on five conditions:

- 1. Ready access to the personal, preferably mobile technology
- 2. Digital connectivity
- 3. Support, empowerment and trust
- 4. Largely unfettered use
- 5. Self-directed learning, able to collaborate when desired.



Without the gear the young can't use digital technology in their learning.

Let's look at each of these in turn.

1. Ready access to the personal, preferably mobile technology

Without the gear the young can't use digital technology in their learning.

What gear?

You don't need the most sophisticated or up to date equipment. It doesn't have to be gilt edged, and you probably have much of it already in the form of one or more of the following: smart TVs, games consoles, video and/or music streaming services, smartphones or tablets, fitness trackers, laptops, desktops, and most importantly access to the Internet.

You can get a long way with a current low-end smartphone (even without a SIM card) so long as it is connected to the Internet. The expertise of the user is more important than the price.

Learning wise it doesn't matter what operating system, or mix of operating systems you have. In a technology agnostic world provided the young have ready access to the Web and key functions (e.g. searching, capturing images, making notes, communicating with others), they will be fine.

Collaborate in the choice of the kit and apps. In trusting and empowering your children and supporting them to direct their own learning it is vital you collaborate with them in the choice of both the hardware and the software. The perceived freedom for the young, and even the very young to choose the apps they want is very important. While ultimately the final decision should be yours occasionally it might be better to go with the children's choice and let them learn – or prove you wrong!

Whose gear?

Without their own kit, they can't normalise the use of digital technology.

The 'ownership' of the kit is important, as is the ability for the young to set up the device/s in a way that suits them. Personalising and empowerment is vital. The young will quickly – and rightly - personalise their kit, configuring it in a way that suits, and selecting the apps they find best. Ownership and personalisation encourages people to take responsibility to look after the gear and its maintenance, as well as strengthening the sense of empowerment.



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At what age?

From very early on the young will rightly use – under the family's guidance - a suite of continually evolving technologies. The strong preference, particularly by the pre-primary and primary age will be for kit with touchscreen and visual controls.

What constraints?

The media and some 'experts' go off the planet about how much screen time the young have.

We suggest talking not of 'screen time' but as Meeker (2018) has done in her annual Internet Reports the 'hours spent using the digital'. In so doing note that the hours spent by US adults using the digital per day has more than doubled in the last decade, from 2.7 hours to 5.9 hours (Meeker, 2018).

Perhaps even more importantly, the focus should be on the nature of the activity rather than just the amount of time spent doing it. There is a difference between passively watching the TV and editing a video, communicating with friends and family, or playing a collaborative game.

Tellingly Rideout (2017) has noted the very young's hours spent in using the digital in the US could well be plateauing at around 2 hours and 20 minutes, as the children opt increasingly to use personal technologies rather than passively watch TV. These findings are consistent with the wider societal move from a mass to more individualised media, where personal device use with the young has exceeded TV viewing (Meeker, 2018).

Sleep is rightly an issue, particularly with the very young, that should be covered by the 'family rules'.

2. Digital connectivity

Children will want to have free access to their device, specific apps and to a fast Internet connection when they need it.

Without that connectivity, most of the learning can't happen.

Their expectations are likely the same as yours.

Being digitally connected is now a central feature of life, work and learning - on trend to become increasingly important and universal.

However, as you full well know Internet access is a potentially dangerous facility that needs to be astutely supervised.

Central to connectivity is the trust you have in each of your kids – and knowing you've done your best as a family to ready them to use the connectivity wisely and safely.

You're going to have most influence in shaping future use in the key formative years, before the media and the peers impact.

The global pattern today (*Meeker, 2018*) is for the very young – from the late twos, through to around eight or nine - to use the family or increasingly their own touchscreen tablet. That use is invariably supervised, the family using the Wi-Fi connectivity to assist in shaping the wise and balanced use.

In the later elementary/primary years the global pattern changes, with the young supplementing the tablet use with smartphones and light laptops.

In moving to the smartphone, commercial networks, tethering and the increasing free societal Wi-Fi access the connectivity will be largely unsupervised.

It is your call on when you are willing to trust each of your children to use the web enabled mobile technologies wisely.



Show
interest in
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children are
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Be
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3. Supported, empowered and trusted

I'm not very confident with the technology so how can I support her?

In a laissez faire environment, where the children become digital very early it is as imperative you shape their learning with the technology from birth, and take prime operational responsibility.

If you want your children to use the digital astutely in growing an apt and balanced holistic education you and the family must model desired digital usage, the values you want to grow, and as a family agree on the ground rules you'll 'teach'.

Model desired behaviour. If you and your partner immerse yourselves in your own kit – if you immediately respond to every ping and call, even in the middle of a meal - those are the values your child will mimic and learn.

Make digital technology use social – don't use a mobile device as an alternative to you interacting with your child.

Show interest in what your children are interested in. Be supportive, but don't try to take over. Empower them to try things out and make mistakes – reducing restrictions on access to as they gain experience.

Develop an open, trusting relationship with your children – where they feel safe telling you what they are doing and particularly when things go wrong, in the knowledge that you will be supportive and won't simply ban the use of the devices.

The trust you accord your kids is critical. While the conversations will invariably centre around the technology, and what it can do it is the trust you place in your children, the empowerment of their learning and the astute support you provide that will most likely most impact their lifelong learning with the digital.

Without the empowerment of, the trust in and the possession of the personal technology the young can't normalise their use of the digital. You'll never normalise its use with tight bans and mechanical controls. Very soon the kids will be free of your controls, ill-prepared to use digital technology astutely.

Research affirms (Anderson, 2016; Lee and Broadie, 2018b) that many teens are tech-savvy. Often – operating as they are at the cutting edge - they understand the dangers well before their elders and the policy makers. Build upon that understanding.

Recognise the value of what they do – 'just playing a game' may involve resilience, persistence, problem solving, creativity, collaboration, communication – all things that we think are important today.



It places them in charge of learning about what they are interested in, when and where, they want.

4. Largely unfettered use

In appreciating the value of their learning give them also the freedom to use the digital largely unfettered.

When we use the term 'largely unfettered' we recognise that in all families there will likely be – and should be - in all families, boundaries the young will need to work within. The nature of those boundaries will reflect the family's values, its educational beliefs, and will change as the young mature and show they can be trusted to use the digital technologies sensibly. The constraints on a three-year-old will for example be very different to a young teen, and a seventeen-year old.

What is important is that the kids in working within the boundaries are free to use the various digital technologies largely as they want. They will then simultaneously grow their ability to take charge of their learning, and develop the capabilities core to life in a networked world.

This freedom allows the kids to grow, in a naturally integrated manner, their curiosity, self-discovery, goal setting, time management, proficiency with different media, understanding of which media to use for each situation, communication and people skills, human networking, self-analysis, collaboration and team work.

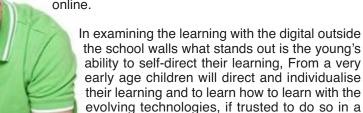
The family's role is to note the growth of those capabilities, to openly value their development and to assist when apt. Too tight a control of children's digital technology use is likely to stymy their learning about and with the digital.

5. Self-directed learning, collaborating when desired

The learning culture, the trust, support, empowerment, freedom and the digital technology all combine to allow the young to largely direct their learning with the digital - and to do so lifelong in a world of accelerating, uncertain, often seemingly chaotic change.

It places them in charge of learning about what they are interested in, when and where, they want.

As noted already you should make the use of digital technology social, gradually extending those involved. Initially the interaction will be with you, then the wider family, then friends in the physical world, then trusted others in



Grow being tech savvy



The strong suggestion is that you address each issue positively, with a digital mindset,

They are, and there will always be perils in working with the evolving digital technologies.

All in the family need to understand how to contend with them, and address those perils from early in the children's life. Again, don't wait for the schools. Let the schools reinforce your work.

While most of today's young have thrived in the seeming chaos, being digitally connected and networked not only presents a myriad of opportunities but also a host of challenges. Some of these like the sexual harassment of girls, bullying and sexting are an amplification of long term concerns, and while others like phishing, identity theft, ratting, 'screen time' and the hacking of accounts are new and come - and often go - with the evolving technology.

There is a plethora of excellent advice freely available online on how to address these challenges. Simply put terms like 'online safety, 'cyber safety', 'protecting your data online' and 'digital citizenship' into a web search and you'll find all manner of material for your part of the world.

That said a significant portion of the advice will likely be reactive, and will advocate bans and mechanical filters.

The strong suggestion is that you address each issue positively, with a digital mindset, separating the media hype from the reality, and take on the advice consistent with the family's approach to learning with the digital. A 2018 study by Common Sense media found;

87% of 13-17 year olds have never been cyber bullied. Only 2% say they have been many times (Common Sense, 2018, p7).

Some common sense advice

- As a family unashamedly enjoy and grow your children's learning with the digital, grabbing the opportunities, trying the new, being creative, celebrating the achievements – but always with your eyes wide open.
- Highlight the importance of common sense and trusting one's instincts. If it looks like spam, if you don't know the sender, trust your instincts. For sure you'll make mistakes but you will learn from them.

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Conclusion

In closing let's recap, and note the key lessons revealed in the research.

Warn them to never give their mobile login to others.

Have them protect their privacy. While the privacy laws vary from country to country, and often province to province most don't allow access the personal information on a personal mobile without a warrant. Sometimes heads and teachers can be a law unto themselves. They usually can't force the kids to give up their password.

The more sophisticated the technology seemingly the greater the array of settings. Understand the factory default settings and decide which to vary.

Particularly have the family understand the tablet and smartphone privacy settings – and then decide which to use. The main technology providers have made a concerted effort to assist families. As have all manner of government agencies and well-intentioned organisations. Look at the options carefully. Many are based on distrust and control. Ask yourself if they support the kind of education you want to grow. That said this kind of advice bears noting https://www.oaic.gov.au/resources/individuals/privacy-fact-sheets/general/ten-privacy-tips-for-parents-and-carers.pdf.



- Control the credit card! Years of often bitter experience highlight why you should never give the kids your card or PIN number to buy online. Do it yourself and protect everyone.
- · Lead by example.
- Involve all the family, modelling the use and learning you want.
- Show interest, provide support (when asked for), celebrate the successes, and learn fast from the 'mistakes'.
- Recognise the value in what they do, including the unexpected 'just playing games' may conceal really useful learning.
- Develop a trusting relationship with your children in which they feel safe telling you about problems that have arisen – in the knowledge that you will not simply ban their technology use.
- Keep it social support your children in connecting with trusted others, gradually extending the range of people as your children's experience increases.

You as a family are very much in the driving seat - not the schools.

You send a very powerful message to your children when you buy them the gear and connectivity, and support them in taking charge of their learning - and their tool kit - from very early in life.

It is a very powerful statement of your belief in your children whose importance can often be forgotten.

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