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NSW FAMILY DAY CARE ASSOCIATION INC.

36 Using Technology in Family Day Care

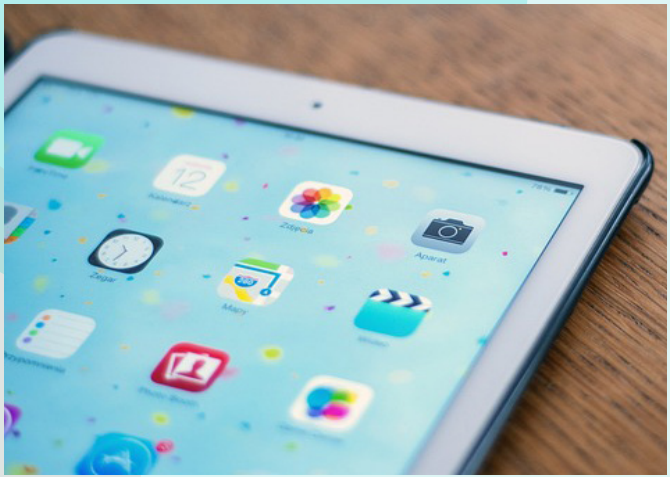
Introduction

How do you feel about technology, specifically using technology in your service with children and families? What do you think of when you think about technology?

For many of us, we go straight to digital technology – those screen-based tools that are everywhere. In a Family Day Care (FDC) setting, these can help you manage your service, support governance, programming and communication. However, technology is a whole range of tools including design tools, where we apply scientific knowledge to a practical aim; through to simple programmable tools such as a traffic light – all the way through to screen-based resources and augmented reality. Being aware of the different types of technology available can be helpful when considering using technology and can support how we feel and how we engage with it.

Whether you avoid it or embrace it, technology is here to stay. We live in an age where screens are part of our lives, in our homes and often part of children's everyday experiences.

There are many ways technology can be used within a FDC setting. However, the focus of this booklet is navigating the digital world and using technology in a safe and appropriate way as part of an educational program. This document draws on the work of Associate Professor Kate Highfield from the University of Canberra.



Digital technology: "First developed in the 1960s with the advent of microprocessors or small 'chips' that convert information into numbers, digital technology enables large amounts of data to be stored and shared so that it can be accessed, created and used by people anywhere, at any time". (ECA 2018, p. 23).

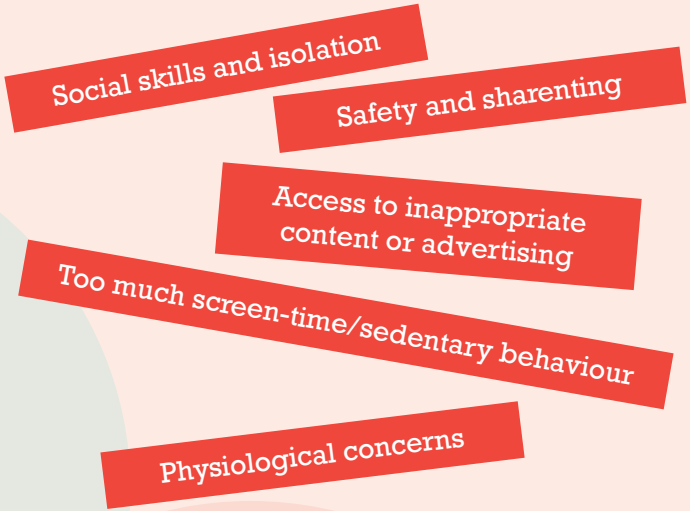
Technologies: includes much more than computers and digital technologies used for information, communication and entertainment. It involves the development of new objects or tools by people that help them in their lives. There are 3 broad types of technology: mechanical (e.g. wheels, blocks, levers and gears) analogue technology (e.g. film-based photography, drawing, painting); and digital technology (e.g. mobile phones and computers) (ECA 2018).

Early Years Learning Framework, p.65 & 68.

Reflection

What did "technology" look like when you were 3 or 4 years old and how has it changed?

Concerns



If technology is not used well, there are some concerns to be aware of particularly when children use screen-based tools for long periods of time or when children use devices in isolation without adult supervision.

Often, a concern is with sedentary behaviour – sitting for too long, poor posture, issues with eyesight and even concepts such as addiction – where children want to play continually with devices. Some research has also raised concerns about eyesight and fine motor development.

A large concern is also with the types of content that children can access. For example, a child could watch content that they don't understand, are confused by, or view violent or scary media (particularly in the news) or be exposed to advertising.

As more children are using technology, concerns about how children access this safely, and the content they are engaging with, have been raised. This includes the digital footprint we are creating for our children, which is all the information about the child that is stored and how it can be accessed. Other concerns include risks of children's images being misused or unknown people communicating with children.

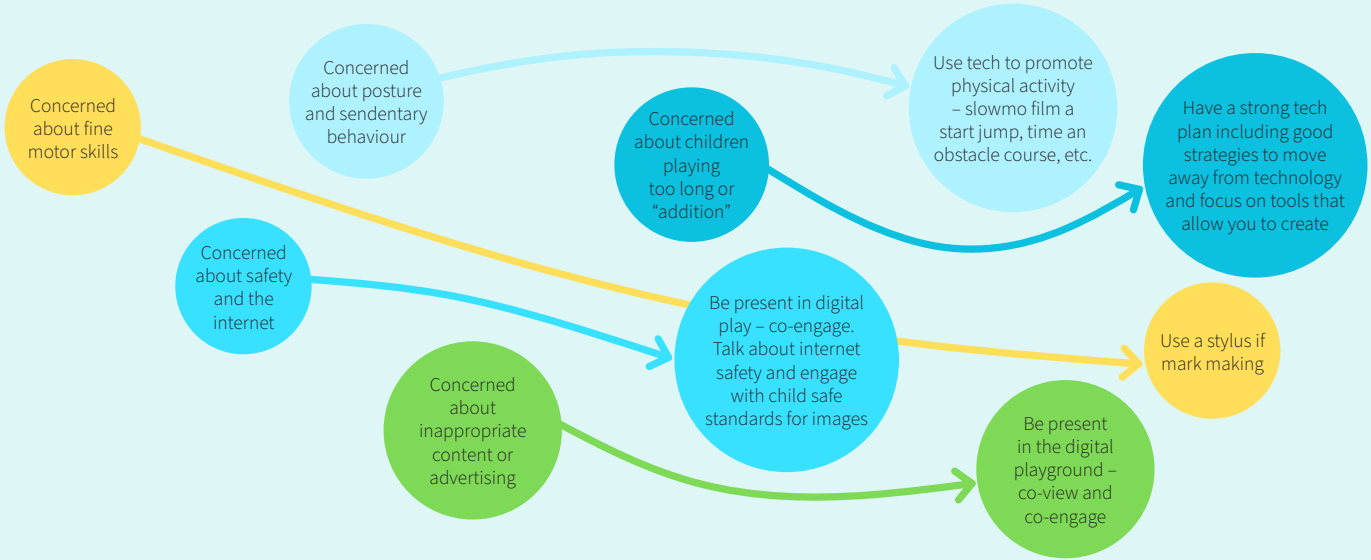
In this booklet, we will frame children's technology use and focus on creative and communicative tools to overcome these concerns.

We also need to help children use technology in a healthy and safe way – so they can engage well.

As Educators who work with young children, it's important to be aware of the concerns and how we overcome them. The following image identifies some key concerns from families and suggests ways that these can be addressed.

The NSW Department of Education website has information on screen time recommendations including a checklist for a healthy approach to screen time which can be shared with families.

When we overcome these concerns and use technology well and in a safe way, we can open an amazing world for young children, extend our practice and create new opportunities. We invite you to take some time to consider these risks and then explore this document – which includes some great strategies to mitigate these risks, and links to resources for you to consider so that we can help children grow up as healthy users of technology.



Using technology

Using technology can open a new world of ideas and possibilities. It can connect children across services, give children a chance to slow things down – or speed them up – it can allow us to look more closely and see new possibilities.

Policies and resources that support with using technology safely

The *Early Years Learning Framework* and *My Time, Our Place* V2.0 include some specific details about technology use that can be helpful. These include new definitions and suggestions for effective technology integration.

The changes in the revised versions help us recognise that young children live in a digital society and that our sector has an essential role to help children navigate this world safely and to enhance their learning. Some key changes include update and expansion of the *EYLF* Principles, with specific mention of 'Educators know children engage with popular culture, media and digital technologies so they build partnerships with families and others to keep children safe and families aware of e-safety information' (*EYLF* V2.0, p.15).

The practices have also been updated, with 'learning through play' expanded to 'facilitate the integration of popular culture, media and digital technologies adding to children's multimodal play' (*EYLF* V2.0, p.22).

We can also see changes to the outcome descriptions with specific mention of technology, safety and media, for example in outcome 5.

Outcome 5 (Children are effective communicators):

- A focus on children as creative, safe and critical users of technology for learning, leisure and creative expression.
- Children express ideas and make meaning using a range of media.
- Children use digital technologies and media to access information, investigate ideas and represent their thinking.

OUTCOME 5: CHILDREN ARE EFFECTIVE COMMUNICATORS

Children use digital technologies and media to access information, investigate ideas and represent their thinking

This is evident when children, for example:

- identify technologies and their use in everyday life
- incorporate real or imaginary technologies as features of their play
- use digital technologies to access images and information, explore diverse perspectives and make sense of their world
- develop simple skills to operate digital devices, such as turning on and taking a photo with a tablet
- use digital technologies and media for creative expression (e.g. designing, drawing, composing)
- engage with technologies and media for fun and social connection
- identify basic icons and keys (e.g. delete button) and use them to support their navigation (e.g. click, swipe, home, scroll) and understand these terms
- adopt collaborative approaches in their learning about and with digital technologies.

Educators promote this learning for all children when they, for example:

- acknowledge technologies are a feature of children's lives and, as such, will be a feature of their imaginative and investigative play
- provide children with access to a range of technologies
- integrate technologies across the curriculum and into children's multimodal play experiences and projects
- teach skills and techniques and encourage children to use technologies to explore new information and represent their ideas
- encourage collaborative learning about and through technologies between children, and children and educators
- provide opportunities for children to have access to different forms of communication technologies
- research topics and search for information with children
- teach children critical reflection skills and encourage them to evaluate the quality and trustworthiness of information sources
- have opportunities to develop their own knowledge and understanding of appropriate digital technology use and safety with children and families
- assist children to have a basic understanding that the internet is a network that people use to connect and source information.

Early Years Learning Framework, p.63

OUTCOME 5: CHILDREN AND YOUNG PEOPLE ARE EFFECTIVE COMMUNICATORS

Children and young people collaborate with others, express ideas and make meaning using a range of digital technologies and media and communication technologies

This is evident when children and young people, for example:

- engage with media and technology for fun and to make meaning
- use language and engage in play to imagine and create roles, scripts and ideas
- use the creative arts such as drawing, painting, sculpture, drama, dance, movement, music and storytelling
- use technologies in everyday life, e.g. recording daily activities in program journals using different software programs
- operate digital devices such as taking photos or making movies with a tablet
- use information and communication technologies safely to express ideas, access images, information and explore diverse perspectives
- engage with information and communication technology tools for designing, drawing, editing, reflecting and composing
- contribute to the development of protocols about the use of digital technologies
- participate in the development of service policies and rules relating to the safe and healthy use of digital media, games and technologies
- express their views about the execution of the daily program or contribute to the planning of the vacation care program
- view, listen and respond to printed, visual and multimedia texts or music and express how it makes them feel
- use tools and techniques to shape, assemble and join materials they are using
- explore a range of materials and their properties.

My Time, Our Place, p.63

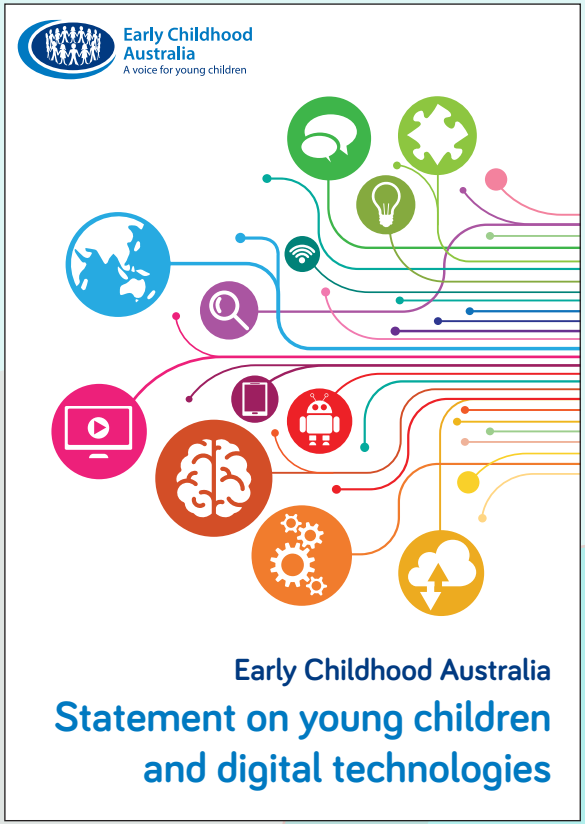
Educators promote this learning for all children and young people when they, for example:

- build on children and young people's family and community experiences with creative and expressive arts
- provide a range of resources that enable children and young people to express meaning through photography, visual arts, dance, drama, music and construction
- join in children and young people's play and leisure activities and co-construct materials, e.g. signs, posters and journals that extend and support literacy learning
- collaborate with children and young people to record the shared experiences
- provide digital media and communication technologies for learning, play and leisure
- encourage children and young people to use technologies with each other and educators
- integrate technologies into children and young people's play and leisure experiences, projects and routines
- talk about health and safety protocols in the use of technology, digital games and media
- facilitate the use of the internet as a network that children and young people use to generate, store, retrieve and share information
- develop protocols about the use of digital technologies safely in partnership with children and young people
- critically reflect on how they are embedding Aboriginal and Torres Strait Islander perspectives into every part of their planning and their setting
- provide Aboriginal and Torres Strait Islander children and young people opportunities to communicate how they are feeling through writing, the arts and construction.

In addition to the approved learning frameworks, there are several other frameworks, resources and statements to guide us on using technology.

Early Childhood Australia's statement on young children and digital technologies helps us consider technology use in relation to four main areas: Relationships; Health and Wellbeing; Citizenship; and Play and Pedagogy. Within each area, there is a guiding principle and a series of practice advice.

This statement is being reviewed and is due to be re-released in 2025/2026. Research that supports and extends these ideas – such as the work of Young Children in Digital Society or The Digital Child – is also worth considering.



Safety

It is vital to ensure that safety is embedded within your practices and shared with families when using technology with children – at the core of online safety is adults who are active participants in the digital world – adults who model, explain, co-engage and co-view. For us in FDC, this is a good reminder that we are making intentional decisions when using technology – we aren't using screens as a digital distraction, they are being used with intentionality.

Intentionality is a key idea from both the EYLF and MTOP V2.0 – It is defined on page 66:

Intentionality: is being thoughtful and purposeful in actions and making decisions and is something that both children and Educators can do.

Children are intentional in their thinking, ways of communication and learning and at times lead their own learning and the learning of others. ***Educators*** are intentional in the roles they take in children's play and the way they intentionally plan the environment and curriculum experiences. (*EYLF* V2.0, p.66)

Children and young people are intentional in their thinking, ways of communication and learning and at times lead their own wellbeing, learning and the wellbeing learning of others. **Educators** are intentional in the roles they take in children's play and leisure and the way they intentionally plan the environment and curriculum experiences. (*MTOP* V2.0. p.66)

Modelling safe use – includes when we verbalise what we are doing – for example, we could ask children for approval before sharing photos: "would you like to share this with mum or dad" is a simple way to model consent with images. We can also model safe use by saying things like "I need to check that video [if we've searched something on a platform like YouTube] to see that it's OK for us to use". This modelling is helpful for children to understand concepts of safety and show that adults are careful in the online world.

Explaining – is part of our everyday work with children. This is similar to modelling but where we take an active moment to explain. For example, you could say "I won't click on that link because I'm not sure where it will take us", or you could say "this section of the website is a bit distracting – it is an advertisement, so we won't focus on that". These simple moments when we explain our digital literacy to children can be powerful in helping them understand a complex space.

Co-engaging and **Co-viewing** are interconnected ideas, co-viewing occurring when we watch media (e.g. streamed media such as ABC iView or YouTube). Co-engaging is where we work with children in digital activities – there are many examples of this, such as helping a child to create a digital book, curate photos, take movies, etc. Co-engaging is essential as we work with children and help them build skills with digital resources.

There are a number of resources that can help us consider safety with children and families:

The e-safety commissioner's work eSafety Early Years is an excellent resource to investigate. This includes resources for Educators and families such as children's books, posters and an eSafety checklist. There are also some great

online learning options. The online safety booklet is a great resource to consider using with children and families, as are their four key ideas to share with families:

Be safe – help your child understand the connected world, how they can protect their personal information and who it is safe to communicate with online.

Be kind – show your child how to be kind and respectful online and model good habits around device use and online sharing.

Ask for help – teach your child when to ask for help and let them know they can come to you with any issue.

Make good choices – help your child to think critically about the content they watch and how they spend their time online.

(retrieved from: www.esafety.gov.au/parents/children-under-5/start-talking-online-safety)

Playing IT safe – is another useful safety resource, with a series of intentional teaching experiences to help children to build their understanding of what the internet is and ideas of consent, such as respectful sharing (see *Guess Who* as a great example). These experiences are designed for us to help young children understand safety behaviours and habits online. There is also a Playing IT Safe Educator Handbook.

ACECQA, in partnership with all governments, developed the National Model Code and Guidelines to promote a child safe culture when it comes to taking, sharing and storing images or videos of children in early childhood education and care. They have been developed as voluntary and designed

for use in centre-based early childhood education services. They do, however, give us a lot to consider how this could be applied in our context. This includes: how do you ensure your policies and procedures clearly state who can access images or videos of children, and how they are stored securely, including how long and how they are destroyed? As FDC Educators and service leaders, you are encouraged to use the resources to support good practice. The Guidelines have some questions to consider regarding the use of electronic devices, which can be adapted to a FDC context.

1. Have you undertaken a risk assessment for usage of electronic devices, including during excursions or for transporting children?
2. How do you ensure child-centred image taking is purposeful and supports quality educational practice and reflection, as well as family connection?
3. How do you monitor who is using devices to take images or videos of children, and who has access to devices where images and videos are stored?
4. What parts of your service should be off limits for taking or recording images or videos of children? (e.g. bathrooms and nappy change facilities).
5. What controls, settings or restrictions do your electronic devices have in place that can minimise the risk of them being used inappropriately? (including ensuring children at the service can't access your personal photos and videos on devices).
6. How will you manage events at your service where families may attend and want to take images or videos of children?
7. How do you manage personal devices that children with additional needs may require access to within your service?

Use technology safely

As we focus in on using technology safely, there are three words which can help us to explore the use of technology with children.

 Consume	 Create	 Communicate

Consume – when we consume technology, we are consuming or accessing pre-made content. This could be a pre-made game – with preset learning objectives and activities, watching streamed media, consuming a television show or video, or using YouTube to look up videos related to a child investigation.

It is important to note that when we consume pre-made content, there are some additional risks – for example, we might access content that children are not yet ready for or perhaps children will get into a state of flow and so want to continue to engage for extended periods of time.

Minimise the risks by

- checking content before sharing it with children
- only using trusted sources
- skipping advertising – or using full screen mode so advertising is reduced e.g. YouTube.

However, when we consume well-chosen content, this can be a way for children to access new spaces and new ideas. ABC Kids has a great collection of videos – for example, the *Through My Windows* videos that can engage children in new ideas safely. When we carefully choose content for children to consume and co-view it with them, it can be an opportunity to extend language and build learning opportunities.

When we consume content safely, we are selecting online media and resources with intentionality, carefully choosing, reviewing and selecting resources from trusted sites.

- ABC Kids – www.abc.net.au/abckids/early-education
- ELSA apps – elsaprogram.com.au

Scenario:

Maria, a FDC Educator based in Canberra, had a child who was very interested in *Finding Nemo* (the movie). Maria decided to explore this interest further by using this as an opportunity to investigate coral reefs. With the Great Barrier Reef, of course, being somewhere too far for many Canberra children to get to, Maria found a series of videos through ABC early childhood and took time to share these with her children. To draw in multiple children to the conversation, she plugged her iPad into the television so that they could all watch together – this joint point of attention meant that they could pause, stop, notice and communicate what they saw – exploring clown fish in the wild, their homes and environments. Here, Maria carefully co-engaged to extend a child's interest. She used a strategy of consuming quality content to extend thinking and enable her children to visit the Great Barrier Reef virtually. Next up, she's planning a visit to an aquarium. Link: www.abc.net.au/abckids/early-education/sustainability-and-nature

Welcome to Reef School

Create – Using technology as a tool to create reduces a lot of the risks we have outlined. These risks are reduced because the child is in control. For example, the child could be creating a collection of photographs, creating a digital book or creating a movie. As the child is the creator, there is less risk of them accessing inappropriate content. From a pedagogic perspective, creating is when we give children the chance to dream big, and it is our technology equivalent of a blank piece of paper or blank canvas. As Educators, we may need to learn how to use some of these tools but once we have mastered them, the opportunities are endless.

Cameras

There are many brilliant tools for us to consider when we are using technology to create – the camera is one of our most powerful tools – encouraging children to take photos that are respectful and following their interests is particularly important. For example, a child might take photos of creatures they find in the outdoor environment or use a clip-on magnifying glass to look more closely. When using your camera, explore tools that slow things down or speed things up. SloMo, or timelapse mode are very powerful ideas for children, although they may be called something different depending on the type of device you are using.

A note on devices:

It is ideal to have a device that is dedicated to the service setting. This reduces the risk of Educators using their personal devices. Devices do not have to be new – a recycled phone (one that has been re-set) with a SIM-card removed can be a great tool to capture images and videos.

Apps to Consider

- Book Creator, Stop Motion, Green Screen by DoInk. Here's some simple videos to show you how to use a range of apps.

Scenario:

Case Camera App and Book Creator – child-led learning. Simon attends a FDC service, he is particularly interested in nature and has recently begun taking photos of leaves. This includes leaves he finds, leaves from the garden and leaves that he collects when we are on excursions. Rather than having a collection of dried leaves, his Educator has started taking photos of the leaves. Sometimes she clips on a magnifying glass and zooms in on the details of leaves. She is working with Simon to create a book using Book Creator. She and Simon co-engage with this project and work together to insert photos and then record audio that accompanies them. In this way, Simon has demonstrated that he has a deep understanding of the natural world and an interesting attention to detail – where he is noticing things such as texture on leaves.

Scenario:

Stop Motion animation – teacher-led/intentional learning. Zari has two children who are really interested in *Bluey* and in how cartoons are made. As part of this, the children have been drawing pictures and then using Stop Motion studio to animate the drawings as characters. While this tool is for stop motion animation – the children have enjoyed creating simple animations with their drawings and then adding a voice over. In creating the animations, they have shown their comprehension of *Bluey* characters and episodes and beginning to build an understanding of story structure.

Communicate – Quality Area 6 of the National Quality Standard states that collaborative relationships with families are fundamental to achieve quality outcomes for children. Community partnerships that focus on active communication, consultation and collaboration also contribute to children's learning and wellbeing. There are many ways that we communicate with families but, sometimes, communication at pick-up times or over distance can be a challenge. Well-chosen digital documentation tools can help with this process but Educators need to clearly set expectations for parents, including how often they'll post and what sort of content they will share. This can be included in your service's child safe environments policy and procedures under the safe use of online environments at the service.

Here, children's rights need to be carefully considered and parental permission sought, especially if sharing via an online platform. Particular care needs to be taken if using social media – and in many cases it does not add to children's education – so it may be ill advised. If sharing any images of children, safety is essential and so we often encourage you to post images that are of hands or work, rather than identifiable images. Respectful engagement is key as we are creating an aspect of that child's digital footprint.

Some Educators choose not to use an online platform but still use technology in communication – this could be with a PowerPoint of images sent via email, or a video of engagement available to view at collection time. Your governance and management policies and procedures should include confidentiality considerations when using any communication channel. For children who are verbal, engaging them in the communication

process is particularly valuable, and a good way to highlight learning that is happening in our services.

For example, in the Apps BookCreator and Explain Everything, you can record audio and add it to a child's images. This simple act gives the child agency in sharing their learning and helps enable documentation to be part of the assessment process – an example of assessment 'as learning' – (*EYLF*, p. 25 and *MTOP*, p.27).

Other tools such as translation software (Google Translate and Chat GTP are two good free options) can help communication across language groups.

Scenario:

Child-led communication. Mika is new to his FDC. Mika's parents are Russian and so his home language is Russian. Mika is quickly developing lots of new words but at times, finds communication challenging. The Educator has been trialling using Google Translate to generate simple audio prompts in Russian – after checking the accuracy of these with Mika's parents. For example, he has simple recordings for common actions such as "it's time to get your jacket" and more complex recordings for unusual activities such as an evacuation practice. Mika has also been using the tool – saying things in Russian for the Educator to read in English – with the talk-to-text translation being helpful (if not completely accurate).

Scenario:

Adult-led communication. Jo is a FDC Educator, she has two new children transitioning into her service. These children are twins and are 11-months old. Jo has been regularly sending updates to their parents via her online App. These focus on both care interactions such as timing of feeds, changes and sleeps but also include photos and videos of the children engaging during the day. Jo has found that the parents really value the way videos and photos enhance the communication for them and help build relationships with the whole family while the twins are in her care.

Extending learning

There are many other tools that are useful in extending learning or facilitating our role, too many to mention here. However, there are two that we should investigate: the first, simple robotics has been used for several decades and may be appealing for those concerned about screen time – the second is a newer, generative artificial intelligence (AI).

Robotics

Robotics and programming are a good example of robotic tools suitable for FDC settings. There are lots of different robotics tools and these have been around for several decades. Programming is a great way for children to understand how technology works. Simple tools such as a Blue-bot or MTiny help children build beginning understandings of coding. From the STEM perspective, they are an opportunity to problem-solve, repeat and build resilience. They also appeal to Educators who would be keen to explore technologies without screens.

Generative artificial intelligence

Generative artificial intelligence (AI) is a complex space and it's a form of technology that has potential for us as FDC Educators to help in our administration. AI includes a large range of tools – including the translation example above – and should be carefully considered including ensuring children's private information or images are not used/uploaded.

However, it can help you with your administration tasks. For example, Chat GTP – is a great resource for identifying ideas. You could ask Chat GTP for a list of ideas to extend a topic and children's learning: e.g. asking "I'm working with 2–4 year olds and they are interested in space and stars. Can you suggest some books to read for this age group" – which results in a long list of books, their authors and a sentence descriptor for Educators to consider. You could extend this by asking for sensory experiences on the same topic – again, a list of ideas is prepared. While Educators need to carefully consider whether these are appropriate for their context, the idea generation can be advantageous.

Another example is using Chat GTP in FDC to suggest meal ideas – here you can also add any dietary requirements, which results in remarkably accurate ideas.

Our role is vital

Regardless of the tools we use, as we engage in this space, we need to remember that we, as Educators, play a vital role. We are driving the pedagogic educational teaching bus. This means that even if there is a great element of technology, we need to consider it carefully and evaluate what it is adding to or taking away from our work with young children. In taking this role we are modelling the choices we make of when to use technology WITH children, when technology should be used BY children and when we should use technology FOR children.

This booklet is part of the PD In Your Pocket professional development program.

This topic – **Using Technology in Family Day Care** – has an accompanying webinar and video, both of which can be viewed as videos or listened to as podcasts.

There is also a Facebook Group where you can discuss the topic with other Family Day Care Educators in NSW.

For more information about PD In Your Pocket, go to:

www.nswfdc.org.au/pdinyourpocket

NSW GOVERNMENT

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