

# Playing IT Safe: developing young children's understanding of digital networks



*Teaching tech through play-based learning can help children to start exploring the digital environment and develop their skills and competence from a very young age. For [www.parenting.digital](http://www.parenting.digital), [Dan Donahoo](#), Senior Advisor at the Alannah & Madeline Foundation, talks about the development of the programme [Playing IT Safe](#) – a tool which aims to help parents, carers and educators teach pre-school children how to stay safe online through activities and play. It encourages and supports parents to model safe practices by co-viewing and co-playing with their children and helps educators to scaffold children's learning by adapting the activities to children's needs. So how is [Playing IT Safe](#) teaching children the skills they need for a digital future and what is the right age to start educating children about*

*digital technology use?*

## A Contradictory Relationship

Our obsession with young children and [screen time](#) mirrors the deepening relationship we all have with screens. We carry the screen in our pocket. It is where we connect, find information, share what we do, know and like. We are entertained and cajoled by what we see on the screen. It amazes us, worries us, scares us, shapes us. We want to celebrate the screen for connecting humans and also blame it for keeping us apart.

Our relationship with screens and technology is so deeply contradictory. This contradiction is a strong part of what has helped drive the development of a new suite of [play-based learning](#) activities and resources designed for early childhood educators in Australia. [Playing IT Safe](#) is designed to guide early childhood educators to sit with the contradiction and [support children's learning](#) and development in the context of their lives. Children's worlds are full of digital technology and impacted by digital networks in many ways. In guiding children's development, we must support them to understand what these digital things are – how they work, [how to interact with them](#) and [how to be safe](#) and kind in a world interconnected by digital technology.

## Teaching tech through play-based learning

This practical resource has been strongly informed by Early Childhood Australia's [Statement on young children and digital technologies](#). Launched in 2018, the Statement is a framework guided by four known areas of importance: play and pedagogy, relationships, health and wellbeing and citizenship. The Statement acknowledges that

Instead of working towards 'one-size-fits-all' advice, a contextual approach recognises that educators are skilled at working in partnership with children and families and making decisions in the best interests of the child.

*Playing IT Safe* offers play-based activities designed to be adapted and scaffolded. It includes prompts for educators that help them consider where children's understanding of digital technology is at and what is required to take them to the next stage of understanding. For this reason, international educators may consider how this resource could inform local contexts or be adapted to suit early learning environments in other countries and settings.

## What do young children know?



The key challenge is ascertaining young children's level of understanding about digital technology so educators have a basis from which to expand this competence. We created a co-design group of 20 early childhood educators who helped develop and then test the play-based activities with children in their services. The work of this group helped identify some of the different ways young children understand digital technology in their world and the varying levels of competence about digital networks that already exist when children come to formal early learning. This helps the iteration and improvement of play-based activities to be adaptable to different ages and stages. For example, an activity "[Dance like a digital thing](#)" is suitable for 2-3-year-olds and offers a chance for them to represent through movement and play their understanding of what digital things are and to further explore the

concept through discussion with their teacher. The co-design process helped to improve the overall learning framework and activities as it considered ways educators could teach along that continuum.

### Playing IT Safe Learning Framework

Playing IT Safe is guided by the [research](#) and the advisory role of Professor Susan Edwards. She oversaw the development of a [learning framework](#) which postulates the idea that children need to understand the world around them and that that world includes living things, non-living things and digital things that can all be connected in different ways. The three key areas of the framework are:

- *Understanding digital networks*: a series of concepts that represent the need for children to understand the different states in which things exist in this world and that they can be connected in different ways
- *People using digital networks*: a series of concepts that represent the way in which digital networks are used by people in their daily lives.
- *Staying safe with digital networks*: a series of concepts that represent the areas that need to be understood to develop a strong working concept of staying safe online while using digital networks.

Out of this framework, the activities recognise that developing safety and capacity in young children requires a focus on digital literacy. For example, we have play-based approaches to teaching a young child that a message can be sent from a phone to a computer, that if they see something scary on a screen they can seek help or support from an adult, or how an Uber Eats driver knows where to bring your food (GPS). Essentially, we use play to try and build and develop and mature children's understanding of these concepts from those aged 12 months to five-years-old.



### Next Steps

*Playing IT Safe* is launching a pilot evaluation project, funded by Gandel Philanthropy, to assess the impact and better understand the way in which children learn through these play-based activities. Those interested in the pilot can [register their interest in our online form](#). *Playing IT Safe* will also be a part of an Australian Research Council Linkage project led by Prof Susan Edwards entitled [Young children in digital society: an online tool for service provision](#). This is all part of the ongoing evolution in understanding how best to support children's development in relation to the changing and dynamic nature of a world of digital technology and networks.

In this sense, *Playing IT Safe* is a step along the road to our understanding and ongoing role in reconciling the contradictions we have around screens and technology and through play-based learning to help children develop and grow in the context of an interconnected digital world.

*Note: Playing IT Safe has been developed in partnership with the Alannah and Madeline Foundation, Australian Federal Police and Office of eSafety Commissioner.*

*First published at [www.parenting.digital](http://www.parenting.digital), this post gives the views of the authors and does not represent the position of the LSE Parenting for a Digital Future blog, nor of the London School of Economics and Political Science.*

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[1] Edwards, S., Nolan, A., Henderson, M., Mantilla, A., Plowman, L., & Skouteris, H. (2018). Young children's everyday concepts of the internet: A platform for cyber-safety education in the early years. *British Journal of Educational Technology*, 49(1), 45-55. <https://doi.org/10.1111/bjet.1252>

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