Are we capitalising on teachable moments? Dr Jo Bird. Lecturer of Early Childhood Education at University of New England, investigates how imaginative technologies in early learning settings are preparing children for the digital world they are growing up in.



Technologies and pretend play

Children are a part of the digital world and they are digital citizens. They do not know about a time when cameras were analogue or encyclopaedias were used to find information on a particular topic. Our responsibility, as educators, is to teach children appropriate ways to navigate the digital world (Palaiologou, 2016).

Raising responsible digital citizens

When children play, they re-create the behaviours and events they see occurring in their daily lives. They take these experiences and pretend they are the major players within these situations. Technologies are a part of this. When children see adults using technologies and placing a certain value on devices, they want to act like adults and use these devices. Educators can use this pretend play to

introduce children to the appropriate use of technologies and the role digital devices will play in their future.

Introducing imaginative technologies

There is a lot of hype around digital technologies in the media, but the focus is on working technologies—the devices that receive input, require power and often include a screen (Bird, 2017)—not on imaginative technologies, which are broken, ex-display models or toy replicas that usually require children to imagine the capabilities and potential of the device (Bird, 2019). Early childhood education settings often provide both working technologies and imaginative technologies. However, they rarely ever consider how children use these devices in play, or the potential teaching opportunities these devices offer.

Imaginative technologies that centres provide usually aim to accurately represent the spaces that children encounter in their wider contexts. For example, the home corner has mobiles, televisions and tablets; the doctor's surgery has computers for the doctor to write patient notes; and restaurants have tablets to take food orders. By providing imaginative technologies in play situations, educators can enhance children's play experiences and use the opportunity to teach them digital literacy and digital ethics alongside encouraging them to explore technological practices and the place of devices within society.

Teaching digital ethics

When using play and imaginative technologies to teach children about ethical use of digital devices, the discussions need to be content-suitable and at a level appropriate for young



Why imaginative technologies?

Originally when I began researching this topic I labelled these devices as non-working technologies. The broken or ex-display models were non-working but children used their imagination to pretend these functioned, allowing their play to continue. In this way, they repurposed the discarded technology and gave it a new lease of life.

In my later research I called these imaginative technologies (Bird, 2019), based on the fact that children are familiar with modern devices and pretend to use them even if these devices do not technically work. This was highlighted to me during a visit to one of the research centres where children changed their behaviours when touchscreen mobiles were introduced. They recognised that these devices took photos and videos and accessed the internet, and they started using the replicas to re-enact situations they were seeing every day, making their play more realistic.

children, and they must cover the fundamentals. For example, at one of the centres, a child spent quite a bit of time in home corner pretending she was a mother. Holding an ex-display touchscreen mobile phone, she recorded her educator dancing to a popular song with some of her peers. In between giggles, she pretended to post the video on social media. This was a good opportunity to discuss with her the ethics of filming her friends and posting the images on social media without their permission. The educator asked her the following questions:

- Do you think your friends mind that you took a video of them dancing?
- What about when you posted it to social media?
- Should you ask them first?

When imaginative technologies are provided in dramatic play areas, such opportunities surface and educators need to make the most of them.

Educators must also capitalise on opportunities where children act out home situations and use their personal experiences, reworking them into their play scenario. Educators can use these scenarios and encourage children to think of other people's experiences and use this shared knowledge in their play. For example, at another centre, the children had a discussion about using mobile phones while having a meal. This prompted children to share their experiences and they negotiated the rules for their restaurant. They decided to only use mobiles if the call was very important or if an answer had to be searched to settle a dispute. Otherwise, the children decided that interacting with each other was more important. When the educator asked the children why each rule was enforced, they displayed their understanding of the role technologies can play without compromising their social interactions.

Pedagogically, we need to consider what we provide and why, yet we also need to ensure we are making the most of the learning opportunities that come with these play themes. Children are capable of difficult conversations and know when behaviours are not respectful. Our role, as educators, is to encourage children to be responsible digital citizens who grow up to be responsible digital adults.

References and further reading

Bird, J. (2017). Children's responses to working and non-working digital technologies. In L. Arnott (Ed.), Digital technologies and learning in the early years (pp. 101-113). London, UK: SAGE Publications.

Bird, J. (2019). 'You need a phone and camera in your bag before you go out!': Children's play with imaginative technologies. British Journal of Educational Technology. https://doi.org/10.1111/bjet.12791

Early Childhood Australia (ECA). (2018). Statement on young children and digital technologies. Canberra, Australia: ECA.

Palaiologou, I. (2016). Teachers' dispositions towards the role of digital devices in play-based pedagogy in early childhood education. Early Years: An International Research Journal, 36(3), 305-321.