**[Karen Hope]:** What do you think is the relationship between children and technology and what are the advantages and or disadvantages of using these technologies with young children? Or do you think advantages and disadvantages is largely an unhelpful way of actually framing the discussion?

**[Anne Kennedy]:** Yeah. I've been thinking about that question. I think when something, we have new provocations, Karen, in our sector, in education, and probably in any sector. We often find it helpful to use the pros and the...

**[Karen Hope]:** Cons.

**[Anne Kennedy]:** Yeah. The advantages, the disadvantages, we can find it quite helpful, but in fact I think it oversimplifies far more complex things. And I think in the end we have to move beyond that, because in the end it comes down to context. It comes down to your... The context where you're working, the children and families you're working with, what's available, what's not available, what families are interested or not interested in what the learning goals are, et cetera. So, yes, I could go through the things that people are saying pro and against, and people can find those things and we can certainly put some of that in a fact sheet, but I call on educators…And those of us who are training educators to kind of think a bit beyond that to be a bit more nuanced about it. Children have a relationship with those technologies, clearly, most of them, I think 97% of Australians have internet access. On the other hand, we saw during COVID, there were families that couldn't provide their children with a computer or a laptop or whatever and we did have, so there are some equity divides there that raises another whole set of questions, I think.

**[Karen Hope]:** Yes, it does.

**[Anne Kennedy]:** That, we could address at another time. But clearly if they have access and they're engaged in, see their families participating in these technologies, they are interested and intrigued by them. They know they're powerful. Seem to understand that. They're given access to those technologies a lot. I mean, how often do we see babies in the trolley with the phone, mum's phone. As somebody said to me recently, we used to give children the car keys to keep them entertained and now we'd give them...

**[Karen Hope]:** The phone.

**[Anne Kennedy]:** The phone. These are all the contexts that educators have to be thinking about.

**[Karen Hope]:** What would you say to an educator that was not keen to introduce these technologies and you do hear this. I know I hear this sometimes in my work, they get enough of this at home, so we're not going to do it here. And you can definitely see where this comes from. And I think a lot of people think maybe children have too much screen time or too much access to them. So what would your response be to an educator when they say I don't want to do it, I don't want to have them?

**[Anne Kennedy]:** I would ask any educator to kind of avoid that. Never, I'm never going to go there, just because it's suggest that you're not open to potential benefits and potential learning, whatever it might be. And we would never say that about, I'm not giving them access to this or that because they get too much of that. It's not a... I think we have to be even handed in the way we approach content. What we should be saying is, so what would be appropriate and how, what am I doing it for, what would be the rationale? And it isn't to entertain, you only do it because we think there's some advantages for learning there.

**[Karen Hope]:** Yes.

**[Anne Kennedy]:** So, that creates a whole new way of thinking about those technologies, but we'd want to do that in partnership with families. And so, just as we wouldn't let it, we wouldn't encourage the child to sit in a sand pit all day.

**[Karen Hope]:** No.

**[Anne Kennedy]:** We'd want to move them on, let them have a variety of experiences. We certainly wouldn't put all our toddlers around, sit in them around, give them a tablet and say go for it. I mean we have to make good pedagogical decisions, always, based on children's best interest principle. That's the first thing.

**[Karen Hope]:** And that includes technology, good pedagogical decisions about technology.

**[Anne Kennedy]:** So we need digital pedagogy, I guess.

**[Karen Hope]:** Yeah.

**[Anne Kennedy]:** That reflects the real world. And that's not easy to make, that's why we're having this conversation, that's why we're encouraging people to do some reading and some thinking.

**[Karen Hope]:** Absolutely.

**[Anne Kennedy]:** We don't want people just to, oh, well this is trendy and I better do it, no, I want, they better think about this because this is a reality, there are debates, but the researchers, there is increasing research in this area. And I know there's a big research project in Australia that's looking at infants and toddlers and technology. I think it's a consortium of about seven different groups.

**[Karen Hope]:** Yes.

**[Anne Kennedy]:** We need that information. Educators need to have a look at the evidence for anything they're going to do.

**[Karen Hope]:** Anything that you do. I was reading a piece of research today. That was a very localised piece of research. And at a kindergarten in Melbourne about the use of iPads, or actually even an early learning centre in Melbourne, banned the use of iPads. And one of the little conclusions that they drew from this kind of little piece of empirical work was around that far from being divisive and solo activities, they found that these iPads were inclusive and the rich language opportunities and the theorizing opportunities and the design opportunities that they presented to groups of children were really interesting for the researchers to take a look at. They were not things that children seem to be huddled over by themselves. They were inclusive and come and have a look at this and look what you can do and let's go outside and take another photo and add some things to it. So, they were saying based on what they had seen, introducing these materials, these particular type of [inaudible] to children, that they were a tool, a pedagogical tool.

**[Anne Kennedy]:** Yeah. I think what you've said reminds me that we do need that academic research, but we also need the educator research. We should, we need, both should inform our practice. The academic research is absolutely of no use unless practitioners can put it into practice and see how it works and evaluate it. And good research, these days, often includes the practitioner, the educator perspective, and they will engage in the research along with the academic work. And that's really powerful, I think.

**[Karen Hope]:** I think it is powerful. I think we need, I totally agree with you. And I think we do need both the academic and the practitioner level, because I think when you see, when the... I think the practitioner level adds a value in terms of how children are using it, perhaps we might not be able to capture. And I was really reminded when I was thinking about preparing for tonight, that in 2020, I actually went to Reggio Emilia and was very much immersed in what they were doing over there with children using digital technology and data projectors, moving away from, as we started this conversation, the idea that it's an iPad or a computer, but a data projector with zoo animals projected onto a white wall where children were sitting and you were basically, the children were being walked over by tigers and slid over by lizards and all of the rich learning that, that threw up as well. That it doesn't just have to be this very narrow view of technology.

**[Anne Kennedy]:** Exactly, exactly. I think that digital, all those digital technologies are [inaudible] and fantastic assets. Yeah.

**[Karen Hope]:** I suppose at the end of, at the end of all of those beautiful things that you can offer to children is a very clever and sophisticated educator whose put thought into that pedagogical decision.

**[Anne Kennedy]:** Yeah. Again, it comes back, as Suzy said to that notion of intentionality, that whatever experiences we're providing, however we set up the environment, we should be thinking deliberate and purposeful and thoughtful. And we do that in consultation, collaboration with families and with children. So, if the children are showing us they're interested in and they're capable of, then why wouldn't we explore that with the children? And one of the things that the children will know very quickly is that we don't have all the answers and that these technologies have an incredible amount of knowledge in them and that we can access. I mean, my phone is virtually Encyclopedia Britannica plus. And who'd have thought that would be possible. So they're aware very early on of the potential in those devices and we should be exploring with them I think, yeah.

**[Karen Hope]:** The connectivity they give us. I've seen children at childcare centres Skyping children in other childcare centres. I've seen children taking photos and emailing to pen pal children in other kindergartens. You're only limited very much by your imagination there.

**[Anne Kennedy]:** Yeah. I've been thinking about the lockdown in Victoria, a hundred and something days?

**[Karen Hope]:** Yes.

**[Anne Kennedy]:** And I was conscious of toddlers who were attending Zoom meetings. Babies that were cuddled during Zoom meetings. They observed their siblings doing schooling. I know using digital technologies, they saw their families connect with each other with extended family in a way that much more than they had normally done on Zoom or whatever, Whatsapp, whatever they're using, their families did all that social connection.

**[Karen Hope]:** Yes.

**[Anne Kennedy]:** Church, their church attendance, whatever it might be, cultural things, was all happening. So how, what we have, really, we can only guess a bit what impact they've had on them.

**[Karen Hope]:** Yes. And I think that will be awhile coming before we know exactly what the impact is on children and for the rest of people that are living in Victoria, what that would be. And I think that these Zoom or the presence of children on Zoom is something that I'm really interested in. I loved stories of educators being able to read to children at night, which is something you can't normally do. You go home to your house and the children go home to their house, but to have educators Zooming in while children were in their pajamas after their bath, was just a lovely anecdote of extending those relationships and using technology to help you with that.

**[Anne Kennedy]:** Yes. And that's what some of that research was looking at, digital technologies, and very young children will focus on the relationship aspect, and your example of the children using the iPads and the social connection. I mean, that goes right back to the very earliest research on computer use, which found the same thing, I'm talking back in the eighties, found the same thing, that they generated discussion and talk rather than isolation and solitary work. So, that's been a long trend, but still people have reservations. So that's where I say, go looking at the research, and go and see what happens if you have a go at it. And you'll see for yourself that, that kind of interaction that happens.

**[Karen Hope]:** I think if you do watch children together, if you actually sit back and watch them, especially around problem solving with technologies. Vygotsky, I think would have loved this had he been alive to see it, but the scaffolding of children who, one might know how to log on and the other one knows how to expand the picture. And the other one knows how to put a caption on it. And the co-constructed learning that actually happens and can happen with technology.

**[Anne Kennedy]:** Well, I've had my young, very young grandchildren find things on my phone that I didn't know were there. So, I mean, I think the tables turn a bit, sometimes, that these digital natives, as you call them.

**[Karen Hope]:** Yes.

**[Anne Kennedy]:** Have an almost intuitive knowledge of the technology. They're not frightened of it. It's just every day to them. And they're quite happy to explore it. And really there's not much they could do with it, really we're more likely to damage our stuff by dropping it.

**[Karen Hope]:** Absolutely.

**[Anne Kennedy]:** It's pretty safe technology for kids to use.

**[Karen Hope]:** It is now. And I think even more so, and I like your point and I think it's so true that they are not afraid of it. They're not afraid of losing their document or their picture. That's actually how they learn and it's that very, I suppose, personality or part of their personality that makes them such rich fodder for using these kinds of things, I think.

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