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In her reflection article "*By-passing the debate: beyond the 'technology question' in the early years*", Prof Edwards convincingly argues the case that to understand the role of new technologies for young children's education, we need to put an end to the endless propaganda arguments advanced by techno-sceptics and techno-enthusiasts and look at the *how* and *what* children learn as they use a variety of technologies in home and school communities.

I have been researching and developing new technologies for young children in the past three years and I couldn't agree more with Associate Professor Edwards. I have found that categorically dismissing or unreservedly celebrating technologies in early years is obstructing the necessary action on this front. Technologies are part and parcel of our everyday lives, they can be both helpful and harmful and it is our responsibility to educate children about their wise and safe use. Although popular media draw oppositions from those who celebrate the advent of new technologies and those who caution against their widespread adoption, it is high time we move on from this dichotomised conflict and provide support for parents and practitioners on a practical, everyday basis. This requires, first and foremost, a sound understanding of how children use diverse technologies, and what these enable in terms of early learning and what they may constrain. For this reason, Edwards' approach (and that of many other colleagues, e.g., Plowman, McPake and Steven, 2008; Flewitt, 2008; Wohlwend, 2010) is to be celebrated as a key step along the route towards developing a detailed understanding of the varied potential roles of new technologies in early years education.

However, although we may agree on the importance of supporting children's engagement with technologies overall, we may disagree on *how* to go about doing this. I have worked with parents who put a strict time limit on children's use of any digital media, but also parents who would let their toddler sleep with a tablet device underneath her or his pillow. Some might argue that rather than simply documenting what current practices are, researchers should seek evidence of successful learning and social environments mediated by digital technologies. I would respond to this by focusing on young children's use of iPads, which are the digital devices I have been recently involved with.

iPads (and comparative touch-screen tablets) have become very popular across all ages in recent years. The internet is peppered with enthusiastic reports of young babies who, unconstrained by previous learning, are “miraculously” quick at navigating through apps (software programs for iPads), ideally sized for their little fingers. There are thousands of children’s apps marketed online as educational, and available freely, or for very low cost. However, the educational value of some apps is often highly questionable and is of great concern to many educational professionals. As someone with a background in psychology, I’m particularly concerned when I see children spending hours playing with apps based on behaviouristic notions of learning; rewarding simple, almost conditioned and repetitive responses, rather than allowing them to generate their own creative content.

From what I have observed in schools and pre-schools, it seems that iPads and tablets are often playing out a familiar scenario in education, when new hardware is thrust into the hands of practitioners without guidance for its potential uses (see e.g., review on tablet computers, Sheehy et al., 2005). In many respects, iPads have highlighted that there is a heightened need for more ICT training for practitioners and more investment in ensuring their preparedness for using ICT in the classroom, especially in early years education (see Plowman & Stephen, 2005).

On the educational research front, it is not unusual to find that researchers would cite newspaper articles rather than peer-reviewed publications as the latter are slow to catch up with the rapidly changing technology landscape. Consequently, several academic colleagues have taken on roles as advisors and facilitators of public discussions online (e.g. Darling, 2011). Before starting systematic scholarly enquiries, we need pioneering research studies, which are often dominated by qualitative research methods (e.g. Hutchison, Beschorner & Schmidt-Crawford, 2012). In addition, some case studies provide valuable information on the iPads’ value in contexts where traditional means of communication are limited (especially for children with autism and apraxia, see e.g. Jowett, Moore & Anderson, 2012).

Clearly, documenting how new devices can be used to support learning requires a detailed understanding of the affordances of specific tools (or in the case of iPads, of specific apps) and for this purpose, we need to ask what is useful for specific purposes, in specific circumstances. For example, when researching iPads in pre-schools, we could be asking: What are the patterns of children’s iPad use in a classroom with no previous touch-screen technology and how do practitioners’ beliefs influence how the devices are used? How likely are ‘iPad effects’ to be sustained in a classroom where ICT expertise is mainly provided by external sources (e.g., external ICT consultant) and how does this relate to the possibility of wirelessly sharing the content of a task

(e.g., an app game, app science project) with other schools? With a specific focus on the iPads' distinct affordances, we could ask how features like automatic saving of activities and a single access point to several 'dormant apps' (i.e. apps which are already downloaded on the hardware and accessible through a single home button) might be influencing children's working patterns. Also, it may be worth investigating how the format and size of the iPad's shared workspace (the device portability, the lack of a lid on the device), might influence opportunities for collaborative engagement in a classroom.

Typically, detailed questions are embedded in detailed evaluations. Both necessitate an in-depth understanding of the affordances of specific technologies and require evidence of their value in specific contexts. This is why we need research studies such as those conducted by Edwards. Until such time as we can provide evidence-based answers to these avenues of enquiry, it is likely that scholarly inquiry will be speculative and based at least partially on researchers' own evaluations. These are likely to vary, given that researchers, just like early years professionals, parents and carers, have particular beliefs about what is developmentally, educationally and socially appropriate for children.

In conclusion, rather than judging whether a piece of technology is educationally sound or not, professionals should reflect on the fact that technologies are neutral, it is us, people, who give them a value and assign a meaning in the way we use and think about them. We all create and shape the learning environments in which our children grow up through our daily engagement with technologies. We all, individually and collectively, contribute to the variety of how young children engage with these tools. If we show children how a balanced and informed use of technologies can enrich our lives, they might gradually develop a sophisticated understanding of the affordances of specific tools. On a similar note to Edwards, I quote Vygotsky to finish my response,: "The child begins to practice with respect to himself the same forms of behavior that others formerly practiced with respect to him" (Vygotsky, 1966, pp.39-40).

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