



Peer-reviewed paper

## **Taking care in questioning new media in early childhood education: Benefits, behaviours, and working conditions**

Andrew Gibbons  
*AUT University*

It makes sense to get excited about new technological experiences in early childhood education. New media like mobile tablet and smart phone technologies have all kinds of exciting applications that can enrich the curriculum in exciting ways – some of which are explored in this issue of *He Kupu*.

### ***Introduction***

In this brief discussion paper I would like to focus on the context in which all the excitement occurs, and also to acknowledge the concerns that continue to guide the careful development and integration of new media in early childhood education. The focus here is on taking ‘care’ and is one which I think is the glue that binds conversations about new media. My intention in this paper is to promote the kinds of questions that maintain a caring approach. While others in this issue have looked at the careful questions that need to be asked to ensure that new media are adopted in developmentally appropriate ways, guided by ideas about quality in early childhood education, I will look at some of the conditions that impact on the ways in which we experience our careful questions, including questions about the ideas that guide the integration of any new media. For instance, what questions can we ask of the drivers of change? And what are the tensions that teachers face given at times competing expectations for what counts as quality? I then turn to a particular interest in the growth of new forms of professional ‘self-surveillance’ that have new technological guises.

### ***Conversations about new media and early childhood education***

I am very interested in the many, and frequent, conversations about education and new media. My interest in these conversations took hold during my work as teacher in an early childhood centre. Around the start of the ‘new millennium’ early childhood centres were under increasing pressure to introduce personal computers to children. Yet also at this time there was sustained suspicion about the negative impact of a technological society on our wellbeing (for instance, on poor physical development as a result of too much sedentary computer game playing and/or learning). This suspicion was certainly fueled by the Y2K hype (highlighting that wider societal trajectories should always be considered relevant to the development of the early childhood curriculum) creating a significant amount of resistance to the role of the computer. Decisions about whether to, and how to, integrate new media into the curriculum were limited by



polemic arguments, for and against, that left little room for teachers and parents to feel that there was a way in which everyone might be more or less happy – a nice big fence to sit on that allowed the teacher and parent to observe the different arguments without having to take sides!

Polemics create barriers to critical reflection upon one's own position and possibilities (Oldridge, 2010). Critical reflection is highly valued in the role of the teacher, although not without concerns regarding both what it means to be critical and reflective. Without such critical reflection, and I think without a big fence to sit on, adults, teachers in particular, are 'torn' between different risk discourses (Oldridge, 2010). These risk discourses influence the ways in which new media become regulated learning events, reinforcing particular relationships to new media. Children learn that there is something quite different to the computer in relation to the sandpit on account of the various rules that are put in place – how much time children should be allowed to spend on the computer, and how that time is monitored, for instance. However, there are rules put in place for all resources in the centre, so it is not that there are rules so much as the nature of the rules and what these rules might be teaching about not just the medium but also the child, teacher, adult, and community. In other words, it is worth questioning what kind of teaching the environment does (whether we call it the first, second, third or other teacher) when the computer is a part of that environment.

Some 15 years on, talk has shifted to mobile devices like tablets, though otherwise not much has changed. And whilst there might be a lot of care for children's experiences with new media, the reason that not much has changed is, in my view, because there is still a lot of surface discussion and not a lot of deeper questioning about the nature and purpose of education. Neither is there much talk about the nature and purpose of technology. Without such talk, debates concerning new media in early childhood education will take on a kind of 'groundhog day' quality. The same old positions will be taken for and against, the same old assumptions about what is natural and what is not for a child, and the same old clichés about the beliefs, behaviours and roles teachers, parents and children should adopt: clichés like the observation that we live in rapidly changing times, or that technology is here to stay so we have to get on with using it in a way that makes our lives better.

The first of these clichés is of interest because it is a matter of perspective, and as a matter of perspective it is quite interesting to consider how generations come to regard their time as much more significant than times before. Often technology is the proof of the significance of the times. For instance the steam engine and the mechanical clock are two examples of interventions that have had a significant impact on experiences of time and space and so arguably created a sense of generational difference (Lesko, 2001). More recently I have been interested in the impact of those signs that are popping up at the entrance to motorways and highways to advise how long a journey is predicted to take. These signs draw together a range of technologies in order to provide for a more efficient and perhaps faster journey. And while like many drivers I am not particularly fond of traffic jams I am very interested in how these technologies might change our behaviours and relationships, including those associated with our perceptions of time. There are many more examples of how technologies become closely associated with the nature of time, and of the time in which 'we' live. So when taking care, the first thing I suggest teachers and parents can do



when being told that times are new and complex and rapidly changing or accelerating is wonder if there have ever been 'simple' and 'slow' times, and then ask: when someone tells me our children are living in such significant times, what are they trying to sell me?

The second of these clichés is more of a worry for me because of the way in which it situates education. Education is about efficiency and progress when teachers and parents are told that they are not to question technology but rather to look at the best ways to apply it to their lives. Here are two questions that I think are critical and relevant: if all children have the same access to and same ability with the latest new media, what kind of fair, just and equitable society do we imagine we will live in? And why do we think that the ubiquity of any product will lead to the reduction of inequity?

I am not saying here that adults should reject technology, but rather they might want to be very suspicious of any suggestion that the 'technological society' is here to stay and there is no other form of life imaginable. To me this is the same as saying that we have no right to freedom from technology. Should our lives be limited to what technology makes possible?

Where criticism or rejection of technological determinations of what is possible for teachers does arise, it will often state that technological determinism is a bad thing for education if education is to be valued as an experience in development or transformation of the self (being and getting wise and/or happy through learning stuff). Technological determinism is in this sense a concern of the kind that is evident in technological futures like 'The Matrix', that requires some kind of amazing human endeavour to escape. Here concerns about technological determinism reflect an impression that technology is a disconnected 'driver' of human behaviour, as if technology has a kind of agency independent of its design and use. In some ways it may well do; however, of more interest to me is the way in which technology is associated with the idea of 'progress', and the ways in which all of the world's natural 'resources', humans included, are things to exploit in the name of progress – a problem observed by German philosopher Martin Heidegger in his work *The Question Concerning Technology* (1977). Think for instance of where talk of new technological advancements in early childhood education are articulated as critical investments for a young child's lifetime of opportunity: "it would seem fair to say that children who enter compulsory schooling without this ICT capital will be disadvantaged compared to children who have had these experiences at home and in their early childhood setting" (Oldridge, 2010, p. 194). While these claims may well be entirely accurate, are they claims that should be taken as inevitable and unchallengeable? If any medium is associated with privilege and the answer is then to try to make sure everyone has the medium, I think we are choosing not just a technologically deterministic approach to both the media and the concerns regarding social equity, we are choosing an economically deterministic approach. We are, in other words, regarding children as future human capital and we are focusing on preparing them as soon as possible for being economically productive. This instrumental, economically orienting approach is evident in the language of 'affordance' that abounds in the research on new media in education.

While the term 'affordance' was developed as an analytic approach to the behavioural relationship between an object in the environment and human



beings (Wright & Parchoma, 2011), it is often taken to mean the qualities of a tool that are of some presumed benefit. In other words, when the word affordance is used, someone is trying to sell you something. Is it a problem that terms change? That depends on the nature and purpose of the shifts in meaning. Wright and Parchoma (2011) note that there can be issues for research communities wanting to dig into the impacts of new media if a term loses a shared meaning. I am less concerned about this, partly because of the interest in meanings never being fixed, always questioned. But this idea of fixed meanings does relate closely to my concern. When teachers start hearing about affordances instead of benefits, the presumed benefits start taking on fixed qualities, as if they are indisputably beneficial. For instance, when teachers start hearing about the affordances of mobile devices in early childhood centres as being their capacity to speed up processes of observing and documenting learning, there is an extra layer of expectation that teachers agree that it is beneficial to speed up processes of observing and documenting learning. However, following the work of Biesta (2014), the role of the teacher loses its educational quality where such assumptions about benefit are made, and where no critical questions are asked.

The potential of new media to accelerate teaching and learning is considered both a benefit and a detriment to new media depending on assumptions regarding the importance of the child's nature and of the value of particular interactions with the environment. Being economically productive involves deep layers of being governed as both individuals and communities (Peters, 2001). And this kind of governing involves complex layers of surveillance in our lives. What is being missed in this technological determinism is thinking about economic determinants of inequity. To emphasise this point I would like to take a different line of inquiry that is arguably more in focus in the minds of teachers of young children in Aotearoa New Zealand at present.

### ***ECE curriculum and a return to behaviourism in the 'Incredible Years'***

Parents, Oldridge's (2010) research of information and communication technologies suggests, typically show a lack of knowledge or critical interest in how new media are used in their child's education, with the exception that *some* parents exercise what has been labelled a 'moral panic' in relation to a young child's access to new media. Moral panic can take the form of worry that children will miss out on life chances without a host of new media in the centre (and teachers willing and able to use them), and it can also take the form of worry that there are both philosophical and biological risks to the use of new media at early ages of life. A third element of moral panic that I am interested in here, relates to the ways in which adult and child relationships start to be mediated by the technology. This moral panic reflects a concern that adults (parents *and* teachers) might use new media as behavioural managers and that there might be a kind of problem associated with any use of a 'plug in drug': in other words, when unable to control children, the threat or promise of access becomes an option for adults. This potential to manage children's behaviour through the use of new media as reward raises concerns about what counts as education (is this a good way to see learning?), and also it reflects concerns that new media industries also see potential to reward and encourage particular media behaviour at earlier and earlier ages (see for instance Rockmore, 2014,



on the ways in which children become addicted to buying additions to their games).

While controlling children's behaviour may well seem a natural enough element in a child-adult relationship, of concern to me is the way in which controlling a child's behaviour is regarded as effective teaching behaviour. The recent New Zealand Government interest and investment in *The Incredible Years* programme, is a very significant example of a renewed interest in behavioural management and in a very instrumentally and economically minded determination of what counts as education and what counts as an educational relationship.

Briefly, *The Incredible Years Teacher* is a sub-programme of *The Incredible Years* (developed in the United States) and is promoted as professional development for teachers that has sound basis in evidence. These kinds of programmes are often attractive because they are shown to have long term beneficial effects for the reduction of costly juvenile and adult behaviours. The assumption here is that well behaved early childhood learners are less likely to cost the state in later life through their incarceration or poor health and so on, and of course they will at the same time be more employable. The programme has been of particular interest in managing and treating children with conduct disorders (Fergusson, Horwood, & Stanley, 2013); however, it is offered as an approach to the management of behaviour in all children, as its focus on behavioursim and social learning theory provides "approaches to help turn disruptive behaviour around and create a more positive learning environment..." (Ministry of Education, 2013, p. 18). While the use of reinforcement and role modelling are the influential outcomes for teachers attending this professional development (see, for instance, Fergusson, Horwood, & Stanley, 2013), the programme developers do acknowledge the importance of children's self-directed play (Webster-Stratton & Reid, 2009) and so there are elements of this approach that reflect contemporary thinking about the nature of learning (through play) and the role of the teacher in sharing in and guiding this play.

However, the use of rewards to reinforce valued behaviours is by far the predominant focus of the resources for teachers. My concern with this predominance is the pedagogical emphasis on controlling children, and controlling particular children and communities who are seen to be more likely to be disruptive to certain visions of progress, and the implications this emphasis has for the role of the teacher in understanding the nature and influence of the environment, of the ways in which childhood and child behaviours are socially and culturally constructed, and of the predominantly economic construction of education.

Curriculum controversies are often concerned with questions regarding 'whose' knowledge is to be prioritised, and such considerations inevitably bring us to question the aims of education as a whole. From a conservative perspective these are typically related to the perceived economic requirement to improve the labour market and from a radically different perspective parents and educators often consider the child's freedom of individual self-expression to be the primary concern (Siraj-Blatchford & Parmar, 2011, p. 46).



My concern is also that teachers are discouraged from asking these questions and instead encouraged to engineer children who are ready for being human capital. Children who are ready for being human capital *are* human capital, and as such are being exploited. This is a very different kind of exploitation to that of, for instance, Victorian England's treatment of child labourers, only if we believe that there is some kind of real choice being exercised by parent and child in enrolling their children in media rich early childhood centres in order to be more employable – perhaps. What is less arguable, in my view, is that the exploitative functions of early childhood education within the technological society are also significant for the experience of being a teacher in a centre. So too then are the teachers being exploited in all the talk of being part of a hi-tech knowledge economy, and it is to the exploitation of the teacher that I would like to turn, returning to the kinds of care that can be taken in questioning the role of new media in early childhood education.

### ***Working conditions: More research required?***

As noted above, new media like tablets allow for different forms of observing, recording and analyzing of children's learning (Fagan & Coutts, n.d.) and of teachers' teaching, with a particular emphasis on the mobility and the immediacy of assessment practices within the community of learners. It would be crazy, I think, to object to these perceived benefits. However, it would be remiss not to question why these benefits are benefits (not affordances), or the ways in which these benefits impact on teaching and learning. How teachers engage in this questioning is the focus of this conclusion. Of particular interest to me is the way in which new forms of surveillance of the child and the teacher are made possible by new media, and how these forms of surveillance operate on the teacher as self-managing.

The rise of self-review in early childhood education has been accompanied by an increasing use of new portfolio technologies to reflect on and develop one's teaching practices and philosophies. New forms of online portfolio use have been regarded to enhance not just the documentation process but also the reflective process (see for instance Jafari and Kaufman's edited collection on ePortfolios, 2006). While there is an enhanced scope in the use of ePortfolios for teachers to engage in deep reflection on their practice, I am concerned that ePortfolios are more likely to become an additional burden for teachers as they measure themselves against teaching standards (see for instance Biesta 2014, on the problem of standards and checklists). This concern fits within a broader critique of governing of individuals to govern themselves as entrepreneurial citizens (Peters, 2001). Teachers are not free to narrate their professional journeys just as children are not free to play – they must do these things because they are believed to be productive human behaviours.

Teachers become burdened with the production of narrative after a narrative that shows not only that they are competent as teachers, but also competent at managing their professional development. Managers, meanwhile, read the portfolios, looking for evidence of both, and ensuring that the processes fit with the expectations of the professional auditing bodies. Why would I think this approach to professional development is a problem? After all, the responsibility of assessing oneself takes some control back, in the same way that other forms



of sociocultural assessments are expected to provide more voice for the individual or group being assessed.

One of my concerns is that this process of technology mediated self-surveillance adds to rather than resolves the significant concerns regarding the working conditions and working experiences of early childhood teachers. The complex reflective philosophical practice of narrating a teaching journey occurs in a profession that has low pay, low status, and high attrition and is constantly under pressure to engage with a wide range of competing expectations. There is certainly a lot of research about how teachers should be doing their work, yet the Organisation for Economic Cooperation and Development (OECD) (2013) suspects that working conditions for teachers are of significant concern, and this is also borne out in research of the relationship between quality of the curriculum and quality of working conditions (Cameron, 2003; Dalli et al., 2011; Havlicek-Cook, 2012; OECD, 2013; Osgood, 2012; Podmore & Meade, 2000; Sumsion, 2002). How might ePortfolios be received if teachers use them to challenge their working conditions?

Quite often research articles end with some reference to the need for more research. Aarsand (2012, p. 187), however, provides an alternative view on research, suggesting that “quite a lot” is known from three decades of research into children’s use of computer technologies, including research of children’s own views. I would like to sit on the fence in relation to the need for more research, because things do change; however, I think that making decisions about new media often tends to be instrumental rather than educational. Instrumental decisions occur when there is limited or no scope to ask critical questions, and in particular where the conversations are significantly and worryingly prefaced by an assumption that early childhood centre communities have no choice about whether or not to participate in a hi-tech information age. So the research that I think needs to be conducted should focus on the ways in which new media impact on working conditions of teachers because there is not enough research of the different ways in which teacher’s experience the day to day conditions of their work.

As I have argued elsewhere (Gibbons, 2007), any new media provides an opportunity to question what is taken for granted and in the context of new media that includes, but is not limited to, that nature of the child’s connection to nature, and to technology. The event of new media throws light upon both the new and the familiar, the taken for granted and the surprising. So, again, this paper is not a rejection of the role of new media in our lives, but rather an aspiration for new media to generate critical approaches to the ways in which caring questions are asked in early childhood education.

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