Building a Culture of Trust:
Trust in the use of Educational Technology

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This paper investigates the place of trust in a school context and its importance in achieving the aims of schooling, “namely high academic performance and positive affects among members of the school community” (Forsyth, 2008). The role of trust in the use of technology and technological change is examined. Literature is surveyed in the fields of trust in the school community and trends which are impacting technology use in schools. The concept of collaborative and participatory culture in particular is examined. Digital citizenship is presented as a necessary component of an educational technology program. Some general suggestions for developing a culture of trust are presented.

Building a culture of trust

I was recently forcefully reminded of the importance of trust in the school context. The first term of the school year was about to finish and my teaching partner and I, as required by the school administration, offered the parents of children in our class the opportunity to have a personal interview with us about their child’s progress. These are the same parents we gave an information session for five short weeks earlier. That was a somewhat different format. Although we tried to make it as informal as possible, inevitably it consisted of us giving information about the year ahead and them listening and asking questions. I remember thinking that they were a tough audience – notepads at the ready, some difficult questions and their responses to our feeble attempts at jokes were hardly encouraging. One father in particular did not crack a smile the whole hour.

Needless to say we weren’t looking forward to our interview with him but it turned out to be a pleasant chat with good humour on both sides and this was the case for all of the interviews. We had to say a few things that parents probably didn’t want to hear and a few parents raised issues with us that we are not quite sure how to deal with but on the whole the parents were open, supportive and collaborative. One shed tears, one told us about the worst period of her life and how it had affected her son, another about her experiences growing up and why she would not subject her son to the same pressures she faced. What was the difference other than five weeks? Well, I think the difference was the five weeks – five weeks in which they had learned to trust us and learned that their children trust us. Two different mothers, after we had described some aspect of their child, which we had observed, said, “Ah, then you do have the real (insert name of child)”.

Trust has the potential to exist on many levels in a school community – between teachers and students, teachers and parents, teachers and teachers, teachers and administrative staff (i.e. principals and deputy principals), teachers and their employing body, students and parents,
parents and administrative staff, parents and parents, students and administrative staff. Its presence or absence can make a world of difference.

The existence of trust in the school community is commonly included as a necessary factor for schools considering major change, including technological change. Many schools are still struggling to integrate digital technologies (or ICTs) into the life of the school. Perhaps no other sector in the world is still working out how to integrate technology into its everyday products and services. As Diana Laurillard writes, “education is on the brink of being transformed through learning technologies; however, it has been on that brink for some decades now” (2008, cited in Selwyn, Potter & Cranmer, 2009, p. 3). Problems abound for schools, e.g. the expense of purchase and maintenance of devices and infrastructure; downtime and unreliability of the “in-house” internet options; blanket restrictions on particular websites; misuse of technology by students and staff to waste time at best and cause damage at worst; resistance from some teachers to change the way they do things; parents’ fears as to what their children will be exposed to.

The latest proffered solution to some of these woes is BYOT (sometimes BYOD) or Bring Your Own Technology (Device). There are many different interpretations of BYOT. Lee and Levins’ (2012) definition is at the idealistic end of the spectrum of interpretations.

Bring your own technology (BYOT) is an educational development and a supplementary school technology resourcing model, where the home and the school collaborate in arranging for students’ 24/7/365 use of their own digital technologies to be extended into the classroom, and in so doing to assist their teaching and learning and the organisation of their schooling and, where relevant, the complementary education outside the classroom. (p. 11)

This interpretation is not just about the technology but also about a different attitude to how and where learning happens in a post-industrial society. Other interpretations involve more retention of control by the school over types of devices and software allowed.

As devices become more portable, more powerful and more affordable, it is hard to imagine that BYOT will not happen, at least as a solution on the purely practical end of the spectrum. BYOT may solve some of the problems listed above although it brings its own issues, e.g. ensuring security of data and devices, equality of access given differences in families’ financial means and creating a school culture in which BYOT can work. This is where trust comes in.

Research on trust in the school community

Research in the field of trust has historically centred on the definition of trust in the context of the school community, how its development can be enhanced or hindered, and its effects on student achievement. Much has also been written on the relationship between home and school and how this affects student outcomes. More recent research focuses on digital communication between home and school and on necessary conditions for effective technological change in schools. This exists within the context of trends in the wider world, particularly in regard to levels of trust involved in online interaction.

The study of trust in the school community is not new. Forsyth (2008) outlines research conducted since the 1980s. Hoy and Kupersmith (1984, 1985, as cited in Forsyth, 2008, paragraph 8) defined trust as "a generalized expectancy held by the work group that the word, promise, and written or oral statement of another individual, group, or organization can be relied upon". Their studies explored how trust could be conceptualised, measured and
examined empirically (Forsyth, 2008). Bryk and Schneider (2002, 2003, as cited in Forsyth, 2008, paragraph 37) considered trust as a concept based in the “role relationships of the school community”, i.e. teacher-principal, teacher-student, teacher-parent and parent-principal. A series of studies by Forsyth and colleagues (2004, 2005, 2006) used the above-mentioned definition of Hoy and Kupersmith to examine parental trust of schools and principals. Forsyth claims that the most important overall findings of these studies are that “trust is critical to primary goals of schools, namely high academic performance and positive affects among members of the school community” (2008, paragraph 1). Writers such as Doda (2011), Meir (2002) and Bryk and Schneider (2003) make a variety of suggestions about how to increase the level of trust in the school community. These are applicable for any school, technology-rich or not.

Many of those who write about the use of technology in schools advocate the need for a culture of trust and healthy relationships between home and school if programs of technological change are to succeed (Selwyn et al., 2010; Levin & Schrum, 2013; Lee, 2010 and Shaw, 2008). This is one of the trust relationships listed by Bryk and Schneider (2002). The study of home-school relationships is also well established. Mackenzie (2009) describes Epstein’s 2002 interpretation of views of parental roles – parenting, communicating, volunteering, learning at home, decision-making, collaborating with the community, and adds parent as learner, scapegoat, consumer and parent as partner with the school, albeit within a relationship where there is considerable disparity of power. Holmes (2010) cites a raft of studies (Villa-Boas 1993; Henderson 1987; Sanders 1997; Christian, Morrison & Bryant 1998; Epstein 2001; Henderson & Mapp 2002), which show that achievement levels improve when students’ parents are partners in their education. Hattie’s 2009 survey concludes that it is when parents are able to “speak the language of schooling” that their children’s educational outcomes are positively influenced (as cited in Holmes, 2010, p. 172).

**Trends in the use of technology in education**

The place of technology in schools has been studied since at least the 1940s (Molnar, 1997) and it would appear that each “generation” since has believed itself to be living in a period of unprecedented change. Molnar describes the “golden age” of education after the 1957 launch of “Sputnik” and in 1997 wrote, “we are experiencing a scientific information explosion of unprecedented proportions (1997, p. 63). Today some of the trends which commentators believe are influencing, or are about to influence, the use of technology in education are: increasing worldwide prevalence of collaborative and participatory culture (Lee & Levins, 2012; Friedman, 2006; Jenkins, Purushotma, Weigel, Clinton & Robison, 2009); cloud-based computing (Johnson, Adams & Haywood, 2011); digital rather than paper based operations across all aspects of education (Lee & Levins, 2012; Lee & Gaffney, 2008; Lee & Finger, 2010); mandated use/teaching of ICTs in schools by education authorities (Selwyn et al., 2010; ACARA, 2011); normalised use of technology and availability of resources and devices which can be easily accessed by students even if they are not physically at school (Prensky, 2010; Lee & Levins, 2010); digital empowerment of students and their parents (Project Tomorrow, 2011); difficulties faced by governments to fund technology in schools (Wells, 2013).

**Collaborative and participatory culture**
Evidence of the existence of trust in the wider digital world can be seen where information and advice are shared on blogs, questions are answered on forums, software is made available without charge. Sometimes businesses and corporations who are not operating in a culture of trust are in fact made accountable by publication of reviews of their products or services. While many of these “commentators” are probably motivated by a bad experience to get online and vent some frustration, others inhabit the digital space on a more ongoing basis and establish a reputation built on the helpfulness and relevance of their input. They may even experience positive effects in the “real world” (job offers, sponsorship deals and offers of free goods and services) because of their activity in the digital world. Rachel Botsman in her TED Talk, “The Currency of the New Economy is Trust” (2012), talks about “the power of technology to build trust between strangers”. Her focus is on collaborative consumption but she sees trust as the factor that enables it to exist and a good online reputation as a valuable possession. In the “real world” there are laws to protect consumers, laws which prevent vendors from making false claims, and avenues for complaint if consumers believe they have been wronged. While these laws may apply equally to online transactions, the path is not so clear if a product was purchased from another country, if the whole thing turns out to be a scam or if the product sought was not so much a tangible item but advice or a recommendation. Buying from or collaborating online with someone who is a “Top-rated seller” with “99.8% positive feedback” on eBay or booking into a hotel which has been positively reviewed on Trip Advisor offers some reassurance.

Digital badging systems have been proposed as another method whereby someone can display their learning or credentials. With the rise of MOOCs (Massive Online Open Courses), there has been a rise in the use of digital badges as recognition of the holder’s achievement and a proof that the holder has done what he/she claims to have done, although the use of badges is not confined to MOOCs. Grant and Shawgo (2013) have annotated a bibliography of sources, which offer information and opinions on different aspects of the badge system. A major issue associated with the badge system is the notion of trust, i.e. whether an employer or person authorised to grant accreditation for prior learning can trust the validity of a badge and the rigour of the learning behind it. Casilli (2012) notes that “Badge systems, as well as their constituent badges, if they are to take firm root and drink deeply from the vast underground sea of social semiotics must not only engender trust, but actively work to build it.” Casilli, along with writers such as Knight (2012) and Leslie (2013), envision a robust, valuable and open system of accreditation and as Leslie (2013) writes, “the value of the system overall increases as more nodes join and a large, robust network emerges over time” (paragraph 14). So far there is little evidence of the badge system in use in Australian schools although schools of distance education are diversifying their offerings beyond the traditional provision for remote students (Isard, 2013; BSDE, 2012). In time a badge will perhaps replace a certificate upon completion of the course.

Jenkins et al. (2009) define “participatory culture” as “a culture with relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing creations, and some type of informal mentorship whereby experienced participants pass along knowledge to novices” In a participatory culture members “believe their contributions matter and feel some degree of social connection with one another” (p. xi). Perhaps Wikipedia is the most widely known example of this. While many of the traits associated with the “digital native” are arguably mythological (Selwyn, 2009; Herther, 2009; Bennett, Maton & Kervin, 2008; Kirkman, 2012), it has been documented that many students engage in participatory practices on a day-to-day basis. The Pew Internet and American Life Project
(Lenhart & Madden, 2005) found that more than half of teenagers have created internet content and one-third of teenagers who use the internet have shared their content online.

**Digital citizenship**

This is an area where students can benefit from adult guidance. Selwyn believes that young people need support to develop experience, confidence and motivation in “designing, implementing and evaluating self-created content” and ensuring that the “social contexts surrounding digital information allow young people to be informed about their choices” (2009, p.374). Selwyn (2009), Buckingham (2007) and Jenkins et al. (2009) all argue for an emphasis on developing children’s critical literacy skills or digital media literacy as a “basic educational entitlement” (Buckingham, 2007, p. 144) to help them to function effectively in the world of contemporary media.

The Partnership for 21st Century Skills (n.d.) elaborates on this concept, claiming that 21st century students need to learn “the 3Rs” (i.e. core Subjects using 21st century themes) and “the 4Cs” (Creativity and Innovation, Critical Thinking and Problem Solving, Communication and Collaboration, as well as Information, Media and Technology Literacies, and Life and Career Skills).

A related concept is that of Digital Citizenship. Gaffney recommends that schools

...embrace the concept of digital citizenship as an outcome for all young people. Such approaches care less about fruitless banning and filtering charades, and more about informing, critiquing and building knowledge, skills, understandings and values to the point where our young people are able to confidently ask questions and find solutions that are life giving for themselves and for others. (2010, p. vi)


Two of the major trust issues involved in the area of technology use are schools’ approaches to entrusting students with technology and the trust parents place in schools to safeguard their children’s wellbeing. Selwyn et al. (2009) describe the two effects of a cyber-bullying incident in a school: “slow restoration of the trust of the parent body through the school being seen to take the incident seriously” but “apparent withdrawal of pupils from wanting to talk with teachers about any aspect of their ICT use” (p. 142). When teachers and school administrators have had previous negative experiences regarding some aspect of technology, their tendency to make rules rather than risk further problems is understandable; however some research has shown that the perceived risks associated with students being online are exaggerated. Cyber-bullying and stalking certainly happen as do instances of young people sharing and posting information and photos which should remain private, and accessing inappropriate content (Internet Safety Technical Taskforce, 2008); however banning the use of devices and programs which are increasingly used in out-of-school time by students, parents and teachers for educational and self-organisational purposes as well as the expected social networking and entertainment, is unlikely to succeed in the long term (Larkin, Finger & Thompson, 2010). As the Berkman Center’s research found, children who are most at risk online “often engage in risky behaviors and have difficulties in other parts of their lives. The psychosocial makeup of and family dynamics surrounding particular minors are better
predictors of risk than the use of specific media or technologies” (Internet Safety Technical Taskforce, 2008, p. 5).

Schools cannot change the dynamics of a student’s home life. What a school can do is make school a safe place for all members of its community, a place where members feel trusted and able to trust. Wessling (2011) writes about the value placed on trust in schools in Finland and how schools go about creating and nurturing it. She observed a focus on deep, “messy” learning rather than on testing and competition.

Conclusion

A long-sighted response to the risks involved in using technology seems to be for schools to actively and deliberately work on developing their cultures of trust and remember that “the focus of a digital school is people, not machines. The experience of those who work and learn in a digital school should be a humanising one, driven by conducive values and school culture towards achieving better learning outcomes for students” (Shaw, 2008, p. 30-31). While writers such as Selwyn et al. (2009), Lee and Levins (2012) and Levin and Schrum (2013) certainly promote the need for reliable, quality infrastructure, technical support for teachers and students and ongoing professional development, just as important are home-school-community partnership, a trusting collaborative school culture and a focus on the learner and the curriculum. Some schools, in adopting BYOT or 1:1 technology have changed their whole approach to learning, moving from a traditional teacher-centred model to a student-centred, project-based curriculum.

Some of the common suggestions for trust building are:

- to allow failure, to engender respect, to slow down, to implement trust-building practices into the school routine (Doda, 2011)
- leadership by the principal, supporting teachers to reach out to parents and it helps if the school is a small, stable community of families have chosen that school (Bryk & Schneider, 2003)
- give children some credit to be able to responsibly work with technology and operate from a position of trust and “wealth” (rather than mistrust and deficit) (Maher & Lee, 2010)

In 2007 the Illinois Institute of Design’s research concluded that schools were:

...following the pattern of what other organisations do when faced with disruptive technology. Time and again, the standard pattern is for organisations to initially ignore disruptive technology, claiming it is not relevant to their core needs. Then they adopt it, using it at first as a faster and better way of doing an existing function. Schools are now in the middle of this first stage of adoption, in which they are using digital media to transform the creation and delivery of information and skills. (Illinois Institute of Design, 2007, as cited in Lee & Gaffney, 2008, p. 69)

Perhaps in 2013 some schools have moved beyond that stage to see technology as a pervasive, ubiquitous and integral part of everyday life in the 21st century and more than just a means of content delivery. For schools to move to the next stage is going to mean a further step out of their comfort zones. With the decision to invite students to bring their own technology comes the necessity for schools to create their own cultures of trust.
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