EDITORIAL

Trust, technology and behavioural intention

A common theme in some of the papers in this issue, and many in the journal, is behavioural intention to use information and communication technology for learning. This discourse regularly draws on the TAM (Davis, Bagozzi, & Warshaw, 1989) and UTAUT (Venkatesh, Morris, Davis, & Davis, 2003) models which derive from what we understand to date about how behaviour is planned and reasoned in relation to technology innovation, though these ideas are not without critics and extensions.

If we focus on the key drivers of TAM, the fundamental idea of perceived ease of use takes our research in one direction related to the kinds of technology we can try and the adaptations we can make to it in order to support and stimulate learning. Innovations abound and new developments constantly offer exciting challenges to the learning and teaching community. However perceived usefulness leads in another direction, the way individuals or institutions value or rate a technology in relation to their own goals and context and the effect this has on the intention to use the technology. This notion of perceived usefulness poses some very big questions about what is of value in learning, what behaviours we see as meaningful in learning, and how we judge the outcomes of learning in relation to technology experiments and interventions.

There is another player in the game: trust. For a particularly helpful summary of definitions of trust see Smith (2010). We might approach the idea of trust from the perspective of the individual or institutions, just like perceived usefulness. In other words, here we speak of trust in technology. We might see it as very useful, used in the right way, but we may not trust it, perhaps through difficulties we have personally experienced, which in turn affects behavioural intention.

Or we may come from the other direction: never having questioned that individuals or institutions would trust the technology, provided it offers acceptable results. The latter conception ignores the affect in human behaviour, supposing that if something works and is clearly proven to have good impacts on learning and is available to us, and we have the skills to use it, then surely we would do so. In this scenario, it takes just one breach of trust, when the technology is abused in some way, for enthusiasts to lose faith in the application or design and change their views. This could be a problem encounter in a discussion forum, or an associated application which drives junk mail, problems which can be solved but which may reduce the trust needed to pursue learning within a particular environment.

Given the increasing ubiquity of information and communication technologies in everyday living, a point usually made in every paper's introduction, we cannot turn Luddite-like away and destroy the devices. In the face of lack of trust we must take another course, and here, oddly, it is technology which offers further tantalising opportunities. I was recently asked to review a conference paper submission which proposed to use technology's monitoring capabilities to monitor learners' behaviours covertly. The stated aim was to learn how to better support learners by guiding their behaviour, and presumably correcting it if it deviated from the norm for that context. My reaction was one of horror. Of course, guiding and correcting learners' behaviour could be said to be the major role of the teacher. But this presupposes that the teacher is "right", has full control and knowledge of the context and learning aims, and is seeking to point learners along a well-trodden path. The older I get, the more I worry about "rightness" and paradigms of teaching which enclose the learner rather than helping them to break free of what is currently known in order to explore the world afresh.

We are well aware of many successful entrepreneurs who have built employment on the basis of their ideas, untrammelled by higher education backgrounds. This kind of creativity and innovation is also developed by enlightened teachers, who do not presume to reproduce mini models of their own knowledge in their students, but encourage challenge and debate, giving learners the space to critique and construct their own knowledge structures. What may be a worry is that learning technologies seem set on reproduction and guidance to planned design, rather than openness to change. Elearning does not seem to thrive in the latter context, despite the Web enabling interaction between learners and teachers. Instead, much of the e-learning literature discusses ways to improve how we lock learners into the past, past models, past structures, past thinking. Technology is so good at packaging content, that we seem to follow a model more akin to consumer marketing practice than to educational outcomes. Adaptive technology solutions which try to respond effectively to enhance the learner experience and outcomes can offer some hope here, but again depend on how learning styles and profiles are initially defined.

The increasing use of webcams for surveillance and the recording and processing of large amounts of data on learning behaviours, called learning analytics, offer opportunities for progressing our understanding of learning but also dangers. Trust in learning organisations and individual teachers will play a vital role in mediating learning technology use as personal learner experience of the costs and benefits of technology for learning affect perceived usefulness and behavioural intention.

References

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. Management Science, 35, 982–1003.

Smith, M. (2010). Building institutional trust through e-government trustworthiness cues. Information Technology and People, 23(3), 222-246.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. MIS Quarterly, 27(3), 425–478.