

Editorial: Reflections on learning online

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A long time ago and in a galaxy far away, my first degree was in electrical engineering. This was over fifty years ago, at a time when many people believe that technology-based learning had not been invented. This of course, is not true and is a consequence of amnesia in the education technology community (Rushby, 1983; Romiszowski & Rushby, 2015). However, it was not until the 1970s that viable systems to manage the learning process became available. By the late 1970s, Plato (developed by the University of Illinois) was supporting several thousand graphics terminals distributed worldwide, running on nearly a dozen different networked mainframe computers (Smith & Sherwood, 1976). So, my undergraduate course was wholly class-room (and laboratory) based. To be honest, the quality of the teaching was not good: I recall one lecturer who spent each lecture copying the course textbook onto the chalkboard with chalk in one hand and an eraser in the other to make space for the next paragraph, while another talked in an impenetrable accent that none of us could decipher. Of the 100 students who started the course, only 60 made it to the second year and fewer than 30 sat the final examinations. On average, each year two students on this undergraduate course attempted suicide.

This was one of the factors that started my interest in ways of improving the quality of university teaching. My postgraduate research examined the application of artificial intelligence to technology-based learning (TBL) and so set my course for the next fifty years. As a strong advocate of TBL, I always believed that it should form part of a media blend, arguing that there should be a strong interpersonal element in the process which could not easily be replaced by technology. That was before the costs of video-conferencing fell to a point where it was accessible to everyone with a connected PC or portable device. Now, not all of the interpersonal activities in which students want to engage can be achieved through Skype, Zoom or Teams, but those applications go some way to bridging the gap in tutoring.

The Covid pandemic has forced us all to move education on-line far quicker than we might have imagined three years ago. The tools are available but the majority of teachers (at all levels of the education system) have experienced a very steep learning curve. It also requires new competences from our learners. Study skills are being (or should be) transformed. Journals in our field (including *Education & Self Development*) have been deluged with submissions on the impacts of the pandemic. Perhaps it is too soon for meta-analyses to determine whether the impact on learning outcomes has been beneficial or not. We need research involving very large samples (thousands rather than tens of learners) across multiple disciplines to draw significant conclusions.

What is clear is that many students do not like it! They feel that their university experience has been compromised and that an important part of their personal development is missing. How much of this is true and how much is perception is not clear to me. It depends on how you view the balance between academic studies and social recreation. Regardless, many students feel that the new higher education process is not delivering value for money and they want their money back! Balanced against this

of course, is the reality that on-line learning 'at scale' implemented on a short time-scale requires significant investment in infrastructure and training.

We should also look at continuing professional development (CPD). For economic reasons much CPD has been delivered by distance means rather than face-to-face. Over the past two years, most of my own self-development has come from courses (often free) from the UK Open University and other universities around the world, and resources on You-Tube. The new study skills needed by our students may ease their transition to making effective use of CPD resources.

In parallel with the move to on-line learning, the world of work is also changing. Many countries have asked people to work from home where possible and, although some are now encouraging a return to the office, people have found that working from home for all or part of the week, is preferable to the daily commute. It can help work-life balance and can reduce travelling costs. The environmental impact is complex but less travelling and smaller office buildings can reduce carbon emissions. Covid may become an endemic disease (rather than an epidemic) but it is here to stay for many years to come. It could be argued that, in this respect at least, a move away from face-to-face teaching is helping our students to prepare for the changing world of work and for their CPD.

I suggest that we need more research into the wider education and self-development impacts of Covid-19.

References

- Romiszwowski, A. & Rushby, N.J. (2015). Remembering the past in research for the future: diagnosis and treatment of social amnesia in the educational technology community. *Educational Technology*. September/October. pp29-34.
- Rushby, N.J. (1983). *Computer based learning: state of the art report*. Maidenhead, UK: Pergamon Infotech. ISBN 0 08 028 5759. pp177-222.
- Smith, S.G. & Sherwood, B.A. (1976). Educational Uses of the PLATO Computer System». *Science*. **192** (4237). pp. 344–52. doi:10.1126/science.769165.