Thirty Years Later: Reflection on Computer Assisted Learning or Communications for Instructional Technology in Distance Education

To celebrate the *International Journal of E-learning and Distance Education*'s 30th anniversary, we thought it would be a great idea to ask a well-known researcher who provided an article for to the inaugural edition of the *Journal*, to reflect on his contribution from 1986. Tony Bates authored the paper, <u>Computer Assisted Learning or Communications: Which Way for Information Technology in Distance Education?</u> We asked him what has changed and what remains the same. His answers are the essence of Tony's views on learning and teaching. Tony is currently a Distinguished Visiting Professor at the G. Raymond Chang School of Continuing Education at Ryerson University in Toronto, Canada. He is an active member of the online and distance learning community and Canada and internationally. Tony's blog is a go-to resource for instructional developers, both new and longtime practitioners. His recent open textbook, *Teaching in a digital age,* is available in multiple formats from the <u>BCcampus open digital repository</u>. The open textbook demonstrates the wealth of knowledge and experience that Tony brings to our community, as well as his generous spirit of engagement with educational technology practitioners.

What follows is Tony's reflection …

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The whole world of educational technology has undergone massive changes over the last 30 years: the Internet, the World Wide Web, social media, Massive Open Online Courses (MOOCs), connectivism, Artificial Intelligence, open educational resources, learning analytics and on and on. Surely anything written then will be completely irrelevant today?

Well, guess what? Here's what I wrote in that famous first edition of the *Journal*:

> Computers can be used in distance education in quite distinct ways…. One approach is to consider the computer as a black box which by and large replaces the traditional teacher…

> [Another] scenario…is to consider the computer merely as a channel of communication between learners and teachers…. The structuring of the teaching is not contained in or restricted by the architecture of the computer, but developed and negotiated between learners and teachers.

While these two approaches can quite happily co-exist in technological terms … they represent completely different educational philosophies, with quite different implications for the organization of distance education.

Almost 30 years later to the day, I did a blog post entitled '<u>Automation or empowerment: online learning at the cross roads</u>' in which I wrote, in response to claims that Artificial Intelligence would enable the replacement of teachers:

> The key question we face is whether online learning should aim to replace teachers and instructors through automation, or whether technology should be used to empower not only teachers but also learners….

We are now seeing a big swing back to the automation of learning, driven by powerful computing developments, Silicon Valley start-up thinking, and a sustained political push from those that want to commercialize education ….

Underlying these developments is a fundamental conflict of philosophies and pedagogies, with automation being driven by an objectivist / behaviourist view of the world, compared with the constructivist approaches of online collaborative learning.

Why is the choice still important? Because, as I wrote in the blog post:

How do we prepare learners for the knowledge and skills they will need in today's society? We need to develop, in very large numbers, people with high-level intellectual and practical skills that require the construction and development of knowledge, and that enable learners to find, analyse, evaluate and apply knowledge appropriately.

This requires a constructivist approach to learning that cannot be appropriately automated, as it depends on high quality interaction between knowledge experts and learners.

Of course, I could be just an old man unwilling to change his ideas in the face of progress. I leave it to you, then, the reader, to decide whether the original article is still relevant.