Ontario's Distance Education & Training Network Le réseau d'éducation et de formation à distance de l'Ontario

Teaching in a Digital Age Webinar Series

The first webinar in this series was held on Tuesday, October 18, 2016, on the topic of Teaching with Technology - How to Use Best Practice Models and Options with Dr. Tony Bates.

There were fourteen questions or comments Dr. Bates was unable to respond to due to time considerations. All other questions and comments posed during the webinar were responded to by Dr. Bates and are included within the recording of the webinar. Click <u>here</u> to access the recording.

We are pleased to share the questions/comments and Dr. Bates' response below.

1: I think it is vital that teachers know how to use the tools available, e.g. virtual classrooms and that they are passionate about it. I would advocate more teacher training.

R: I agree with both your points. However training in pedagogical approaches/teaching methods is just as important as learning how to use the tools

2: I teach "how to teach with technology" so I teach by example, small group practice, and "real world" evaluation. (My students are current teachers so I have the advantage that they have real problems & situations to structure the content around.)

R: Great: starting with learners' interests and challenges is a great way to teach, whether using (or about) technology or not.

3: Thank you very much. The growth in predatory journals is also an issue, as well as ghost writers and funders of health research

R: Correct. The real danger with social media is people talking to only those with the same views/prejudices. You don't learn anything that way.

4: Funding (or lack thereof) also an issue when looking at technologies

R: You are correct in that there is nearly always a cost in making changes but it is not usually the technology costs that are the problem but the costs of training and the time instructors take to learn to do things differently. And now because change is almost constant, we should be building that cost into our budgeting and funding. This is a classic case where investment is needed to increase productivity. It may cost a bit more but the results will be better.

Contact North | Contact Nord 1139, promenade Alloy Drive, Suite/bureau 104 Thunder Bay, Ontario P7B 6M8 Tel | Tél.: 807-344-1616 Fax | Téléc.: 807-344-2390 1-877-999-9149 | www.contactnorth.ca | www.contactnord.ca 5: I just warn my students now that I'll be trying something new and warn them that I want feedback on if it works or not. The students seem happy that I ask them for to give me feedback.

R: Yes, teaching is also a skill and it needs both practice and especially constant feedback.

6: Choice of method can depend on the subject matter itself - apprenticeship for computer programming can be different than apprenticeship for automotive service technicians - one can be fully online vs hybrid or campus-based for the latter.

R: Yes, context is always critical in education, which is why it is dangerous/difficult to make broad generalizations. However, having said that, the main driver of choice of teaching methods should be the learning outcomes you are trying to achieve, both in terms of content and skills.

7: I've been working in the language and basic skills sector, specializing in online learning, for the past 4 years. We've found that for low-level learners, combining live classes and workshops with online learning generated the best learning outcomes.

R: Yes, this is line with the research (e.g. Means et al, 2011 – see book bibliography) which found overall that there is no difference in effectiveness between fully online and face-to-face learning, but blended learning was slightly more effective, mainly due to increased time on task by students, i.e. it got them to work harder!

8: More in terms of technology and pedagogy being so intertwined that it is hard to separate them today.

R: I agree, except that it is important to focus primarily on learning outcomes (while taking into account that technology can enable new or better outcomes), than on how the technology can best help to meet these.

9: Do you know of any examples of successful BYOD approaches in higher education? Seems to work better with younger learners.

R: Not much (good) research on this but practice seems to indicate that it works best when the teaching is redesigned deliberately to integrate BYOD devices into the teaching, both in class and online. For instance, in Mexico, the Universidad de Guadalajara has a very successful program where all students use tablets, but instructors have deliberately re-designed their teaching around this fact.

10: Regarding the question if you need face-to-face experience, I think that if you are passionate about teaching, you can teach online-only without prior experience in face-to-face. It is more about having empathy and skill than being there in presence.

R: Perhaps – another question though that needs more research.

11: Books are technology and caused problems when they became widely available. We just didn't think about "old" tech, shame on us.

R: I agree that books or at least text still has a very important place, particularly in higher education, because it suits a particular type of learning based on abstraction, reasoning, and questioning. This is discussed further in Chapter 7.2 in, yes, my book!

12: Psycho-motor skills are not necessarily able to be taught online (e.g. automotive service technicians need to work with physical cars and their systems)

R: I agree that there are still many psycho-motor skills that are not yet able to be taught effectively online, but things are changing with technology such as augmented reality. Pilots for instance learn a great deal through simulators. We are also seeing increased use of remote labs as well. Even golf coaches these days use video and computer analysis to improve golfers' psycho-motor skills. Again it is not so much a case of technology replacing but augmenting the development of psycho-motor skills.

13: Maybe first online courses for students should be in small classes so they can get more feedback and use video conferencing to help with the shift from face-to-face.

R Good suggestion, but a gradual and phased introduction through blended learning is another way, as often an individual teacher doesn't have control over class size.

14: In the end, technology is a tool that allows us to do wonderful things and collaborate. But that's all it is. Nothing will ever replace an intelligent teacher who can truly engages the students.

R: I wish I had your confidence on this. I do believe it, but daily I see more and more replacement of human behaviour by machines. It's not always for the best, by any means, but the external pressure is always there. See http://www.tonybates.ca/2016/03/15/technology-and-alienation-online-learning-and-labour-market-needs/.

Click <u>here</u> to read Teaching in a Digital Age.

Click <u>here</u> to read 10 Fundamentals of Teaching Online for Faculty and Instructors by Dr. Tony Bates.