EDITOR'S INTRODUCTION

From Machines and Screens to Learning

This issue of *Teaching & Learning Inquiry* features a good number of papers that involve technology in some way. While we don't strategically seek out papers with this focus, we certainly welcome them. This time through, we see technology applied to enhance the ways students can provide peer feedback, document and reflect upon their learning, and make better use of class time. We also enter the world of massive open online courses (MOOCs) to see how technology can better support learning in those environments. The applications of learning technology in these cases are creative, and the data collected suggest that those applications are effective. There is always something exciting and satisfying in the newness of all this, but such work also invites us to reflect on just what is new and what isn't as we apply technology to student learning.

When online learning environments began to proliferate, one of our colleagues predicted that these environments would take the place of "bricks and mortar." We also remember back in that day colleagues expressing indignation at the possibility that institutions' in-person population would drop by as much as two-thirds in ensuing years. That indignation, whether we felt it or not, was not the real source of fascination for us though. Rather, it was the *justifications* for the indignation that attracted the attention of those of us working in teaching and learning enhancement. It wasn't just that some faculty felt that the things they held near and dear where being threatened, but that they *actually held something near and dear about higher education* and, in particular, teaching and learning.

As these values were articulated with considerable fervor, we saw that the advent of educational technology, as much as anything before it, had spawned one of the most passionate conversations about teaching and learning in many years. Quite suddenly, it wasn't just about technology—it was about *learning*.

This brings us back to some of the papers in our current issue. Yes, taken on one level they are about technology, and that is good. However, at their heart they are about much more than machines and screens. These papers are about students learning from each other and just what that might entail. They are about dramatically increasing access to higher education and all that it can offer. They are about new ways of using face-to-face time, and about how to best help students document what they have learned. Technology, as it has always been, is a vehicle for affecting processes that we believe to be at the heart of student learning.

Perhaps we will always be drawn to the cool things technology can do, and that attraction at times will precede considerations about student learning outcomes—as in, "Whoa, this is cool... what can we do with it?" This flies in the face of so called "backward design" (Wiggins and McTighe, 1998), where we start with those learning outcomes and then we go looking for means to achieve them. Those means may be "cool," but that isn't the point. As is demonstrated by papers in our current issue (and many others), the point is whether technologies can facilitate the journey toward learning outcomes.

Perhaps you have heard predictions that, over the course of time, we might stop talking about

learning "technology" the way we have stopped talking about the wonders of chalk or photocopying or email. Paradoxically then, just as this introduction singles out some papers because of their focus on technology, we would also predict that such singling out will soon enough become obsolete.

What will not be taken for granted, however, is the importance of learning as an endpoint. Our sense of wonder regarding this universal phenomenon and, at times, our befuddlement regarding its nature, are unwavering constants for journals like *TLI*. Maybe this helps explain why, even with the proliferation of educational technology, bricks and mortar appear to be proliferating right along with it. Some explain this in terms of students' needs to be physically present with instructors and fellow students (see, for example Paechter and Maie, 2010). This may well be true. We suggest that, as instructors, we have a corresponding need to witness learning as best we can. It is the excitement associated with this witnessing that fuels our interest in educational technology. This goes well beyond its coolness, as the papers in issue 5.2 so aptly remind us.

REFERENCES

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