Canadian Journal of Learning and Technology / La revue canadienne de l'apprentissage et de la technologie, V33(3) Fall / automne, 2007

Canadian Journal of Learning and Technology

Volume 33(3) Fall / automne 2007

Editorial: A prelude to an educational technology octet

Michele Jacobsen

In music, an octet can be a musical ensemble consisting of eight instruments or players or voices. An octet can be a musical composition written specifically for a string or wind ensemble of eight players or instruments. In the Fall 2007 issue of the *Canadian Journal of Learning and Technology,* the editorial team presents an educational technology octet – eight new scholarly papers that amplify seventeen different author voices and employ a variety of research methodologies / instruments to investigate key questions and to advance knowledge in the field. It has been a delight to work with this ensemble of scholars to prepare these manuscripts for publication.

The main purpose of this editorial is to orchestrate an overview of key ideas from each of the eight scholarly papers. The second purpose is to locate the Fall 2007 issue as the third in the 33 rd Volume of the *Canadian Journal of Learning and Technology* (CJLT). Why? In addition to the scholarship played out in these pages, what makes this particular issue memorable is that this is the first issue of CJLT that will be distributed to all members of The Canadian Network for Innovation in Education (CNIE). While the disciplines of Distance Education and Educational Technology can often bear a strong family resemblance, the disciplines are also distinct and there is enduring value for both to continue to be served by a reputable Canadian peer reviewed journal that publishes research in both English and French. Thus, all CNIE members will now automatically receive both *CJLT*, and the *Journal of Distance Education*, edited by Mark Bullen, Lucie Lavoie and Francois Pettigrew.

So, "*let's get together, do a little dance, make a little love, and get down tonight*". KC and the Sunshine Band topped the music charts with the single, "Get Down Tonight" in 1975, about 3 years after the Canadian Education Media Council first published the newsletter *Media Message* in January 1972 (which eventually became the *Canadian Journal of Educational Communications* [CJEC], published from 1979-2002, the precursor to CJLT) . In all seriousness, both educational technology and distance education scholars are encouraged to take a moment to celebrate this time in our shared history during which scholars have come together to form a new association that supports two peer-reviewed scholarly journals in which to publish our work and advance the collective knowledge in both fields.

The Octet

In the first article, entitled "Le discours des élèves du secondaire de la région Bas Saint-Laurent face à l'intégration des technologies de l'information et de la communication (TIC) dans l'apprentissage", Sasseville summarizes high school students' perceptions of ICT in their learning. Interview results address the following questions: How do secondary school students perceive ICT in the classroom? Is ICT relevant to them as a learning tool? Do they see this technology as essential to their success? An interesting finding is that while high school students regard ICT as a stimulating and motivating learning tool, they do not appear to regard ICT as essential to their academic success.

In the second paper, "' We just disagree:' Using deliberative inquiry to seek consensus about the effects of e-learning on higher education", Kelland and Kanuka explore perspectives on the effects of e-learning technologies in higher education learning experiences. Participants were cross-Canada, cross-disciplinary administrators of distance-delivered programs in higher education using e-learning technologies. Study findings confirm that (1) there are many varied and polarized perspectives about e-learning, and each position should be carefully considered by policymakers and administrators concerned with implementing e-learning technologies; (2) it is unlikely that e-learning experts will reach consensus on the effects of e-learning technologies within educational contexts; and, (3) the use of e-learning technologies in higher education will continue to vary based on subject matter, instructors, institutions, contexts, availability of technology and various other factors—not the least of which are the purpose of the learning activities and the epistemological beliefs about higher education.

The third paper in this issue, entitled " Introducing Laptops to Children: An Examination of Ubiquitous Computing in Grade 3 Reading, Language, and Mathematics", Bernard, Bethel, Abrami and Wade examine the achievement outcomes in a Grade 3 laptop initiative in a Quebec school district in the first year of implementation. Student performance in reading, language arts and mathematics was measured at the end of Grade 2 and again at the end of Grade 3 using standardized instruments. While the authors found little direct evidence that the ubiquitous use of laptops in Grade 3 had any overall influence on achievement gains in reading, language and mathematics in year one, the data did suggest that the laptop initiative helped lower achieving students, particularly in language and mathematics. Teacher surveys were correlated with achievement data. A need for more professional support for instructional implementations of computing emerged from teacher responses. In terms of advancing knowledge, the question of whether laptop programs can influence achievement as measured by standardized instruments in the first year of implementation remains open.

Kinash's study, entitled " Animating Inquiry-Based Teaching in Grade-School Classrooms", examines the type of professional support that is required when school teachers combine inquiry-based learning with educational technology. Kinash conducted interpretive research with classroom teachers who have been engaged in face-to-face and/or online professional development with the Galileo Educational Network. The Galileo approach to professional development emphasizes an inquiry stance in teaching practice and learner assessment, and how technology supports and extends learning opportunities. This study contributes to knowledge in two key ways. First, what made a difference to teachers was the nature of professional supports and responsive mentoring in the context of practice rather than the delivery medium. Second, three types of professional support tend to help teachers change classroom practice, from teacher release time, to face-to-face orientations to online supports, and built-in accountability. This study begins to answer the question of how best to educate teachers for an inquiry stance and for meaningful use of technology in the classroom.

In the fifth paper, entitled " Preservice teachers' preparedness to integrate computer technology into the curriculum

", Magliaro and Ezeife combine quantitative and qualitative approaches to examine the computer self-efficacy beliefs of 210 preservice teachers after their first practice teaching placement. Students' previous undergraduate degrees, licensure areas, experience and familiarity with software packages were found to have statistically significant effects on computer self-efficacy. Qualitative responses indicated that society and school were the most positive factors that influenced preservice teachers' attitudes towards computers. A key finding of this study is that the type of undergraduate degree obtained (i.e., Science, Arts, Social Science) by preservice teachers was a factor in their computer self-efficacy status. Magliaro and Ezeife's findings suggest that preservice teachers with higher computer-use self-efficacy scores were more ready to integrate computers into their lessons than those

The sixth paper, entitled " Instructional Technology and Objectification" is a position paper in which Gur and Wiley provide a critique of objectification in education in order to reveal several problems associated with prepackaged learning materials or education-as-artifacts as it relates to instructional technology (IT). Objectification refers to the way in which everything (including human beings) is treated as an object to be manipulated and used. In the context of Heidegger's critique of technology, the authors claim that objectification in education is metaphysical in the sense that the intelligibility (being) of education is equated with ready-to-use packages, and thus is reduced to delivery and transmission of objects. The embodiment dimension of teaching and learning is helpful for resisting this reduction. The authors argue that objectification increases bureaucratic control over the teaching process and deskills teachers. The authors conclude that instructional designers should create structures in which a care relation and dialogue between students and teachers can take place.

In the seventh article, " Online learning management systems (LMS) and sense of community: A pre-service practicum perspective", Rideout, Bruinsma, Hull and Modayil examine the impact of an online learning management system (LMS) on pre-service teachers' sense of community during their major practicum. Via the learning system, student teachers remained connected to peers, professors, and supervisors while developing new relationships with in-school personnel such as mentor teachers, principals, and students. A survey revealed that pre-service teachers perceived a higher sense of community with other pre-service teachers online versus with teaching faculty and part-time practicum supervisors.

The final paper rounding out this octet, " Video-based Multimedia Designs: A Research Study Testing Learning Effectiveness ", is a comparative study by Reiss. Building on seminal work conducted by Richard Mayer and Roxana Morino, Reiss explores some assumptions about video-based multimedia designs. In this quantitative study, a two-minute video presentation was created and played back to college freshmen using three different types of media players. It was assumed that enhanced designs that presented different types of related information would reinforce the material and produce better comprehension and retention. However, the standard video player turned out to be the most effective overall, which suggests that media designs able to control the focus of a learner's attention to one specific stream of information, a *single-stream focused approach*, may be the most effective way to present media-based content.

Coda

The *Canadian Journal of Learning and Technology* continues to offer a unique academic service to the international field of educational technology in that manuscripts are accepted and published in either English or French. All abstracts are published in both official Canadian languages. The Editorial Team and Editorial Board are very fortunate to include members who are fluent in either or both of Canada's official languages. As this issue (finally) goes to print, it is important to acknowledge the work of a dedicated ensemble of players. I extend a sincere thank-you to the French Associate Editor, Dr. François Desjardins, and to Review Editor, Dr. Jennifer Lock, for their ongoing contributions to this journal's editorial team. Thank you, Maureen Washington, the journal's copyeditor and layout designer, who works carefully with authors to prepare the final version of CJLT for publication, and to Krista Poscente, the managing editor in charge of moving the present CJLT web journal over to the AUPress online journal system. Finally, thank you Francois Pettigrew for translating the English abstracts to French.

Dr. Michele Jacobsen is an associate professor in educational technology at the University of Calgary. She has been Editor of the *Canadian Journal of Learning and Technology* since January 2005. Please send all inquiries about the journal to cjlt@ucalgary.ca