Research questions in educational technology tend to evolve in a predictable and cyclical manner in response to new forms of media. In a historical review of technology in the classroom since 1920, Cuban (1986) documents the type of questions asked when film and radio, instructional television, and then computer-based educational media arrived in the classroom. Questions tended to evolve from ‘how does the media work’, to ‘does it work for learning’, to ‘does it work better than what we do now’. Granted, the field has matured beyond simply comparing conventional and new approaches to combining technology and learning. While these initial questions do have a role, current educational technology research tends to be characterized by complex questions that acknowledge and intentionally examine the nature and impact of conditions and contexts of use, diverse learner characteristics, the specific pedagogical interventions, the type of technological and digital media employed, and the exact purpose for which new media and methods were chosen. Given the complexity of questions that tend to characterize the often diverse approaches to research in our field, there is a pressing need for systematic reviews of the primary research that has been conducted.

Over a year ago, Phil Abrami approached the journal with an interesting idea. The Canadian Council on Learning (CCL) had recently funded him, Bob Bernard, Anne Wade and Richard Schmid, to conduct an extensive review of e-learning in Canada. He wondered if CJLT might be interested in exploring the possibility of publishing this extensive and current review along with critical comment from scholarly, policy-making and practitioners’ perspectives.

There are several reasons why a special issue on e-learning in Canada should be published. The primary reason, which is the need for systematic reviews of primary research in our field, has been mentioned. Over sixty years ago, Vannevar Bush (1945) called for a new relationship between us and the bewildering store of our knowledge.

Based on scientific knowledge and understanding after the war, Bush (1945) describes the memex, a system of named links and trails between scientific documents and other objects of knowledge. Bush’s essay predates the plethora of information available to academics on the World Wide Web. Given the growth in academic publications and the number of researchers that publish in them in recent years, it is our present reality that across fields and specializations the sheer number of research articles published in academic journals and through other means is growing at an exponential rate.
Challenges with metadata aside, we presently have increasingly reliable technological means for searching, sorting, organizing and accessing a large portion of the knowledge store. However, the art and craft of making sense of this work through meta-analysis, quasi-meta-analysis and systematic literature review still requires thoughtful planning, analysis and evaluation. Quality literature reviews explore the primary research literature on a topic in order to determine major issues of importance for future research, to understand these issues in relation to theory and application, to find the frontier of research on a topic, to relate a problem or question to existing theory, or to put a conceptualized problem in the context of previous research. In this systematic review of e-learning in Canada, the authors accomplish the challenging task of selecting, examining and synthesizing a large body of primary research and knowledge to determine major issues of importance and present relevant findings in an effective, concise and accessible manner.

Journals are always on the prowl for interesting and timely research that might shed new light, provoke debate, or challenge existing assumptions; in short, research that makes a valuable contribution to the living discipline of inquiry. A second reason the idea of a special issue was so intriguing was the opportunity to build and extend on the CCL review with invited commentary from other leading Canadian researchers. The intent, from the beginning, was to stimulate discussion and debate among experts in the field in a transparent and open way. Authors of the review invited and expected rigorous and critical commentary on their work. Each of the commentators was invited to review and respond to the CCL review from their unique perspective and areas of expertise. The review authors prepared a response to the expert commentary.

Canadians seem to regard e-learning as a critically important component of life and learning. There is a plethora of research, policy and perspective published about e-learning in academic journals, provincial and federal websites and policy documents, university websites, corporate webinars, weblogs and wikis. It does appear that “powerful technologies change our expectations and curricula” (Shneiderman, 2002, p. 118). Technologies enable us to keep in touch, via the cell phone, courseware, weblogs, wikis, podcasts. Although these digital tools let us share thoughts and ideas, music, and pictures, words and images, back and forth with increasing ease and frequency, what these technologies really let us share is emotion (Norman, 2004). Educational institutions continue to experiment with and explore diverse methods and media to provide anytime and anywhere products and services to faculty, staff and students. The ability to keep in touch throughout the day maintains a relationship, whether it be business or social. (Norman, p. 151). How often and in what ways should we be in touch to maintain an educational relationship?

Norman (2004) writes that distance used to matter. The good and bad news for e-learning is that today’s digital devices enable us to always be connected. Designers struggle to ensure the ubiquitous presence of communication technology, so not matter where we are, not matter what we are doing, our ability to keep in touch, to make contact, is available (Norman, 2004). The communication revolution has barely begun: if it is so pervasive now, at the start of the twenty first century, what will it be like in one hundred years? ( Norman, 2004). Will our questions continue to evolve? Not that long ago, distance education used to involve the intermittent exchange of documents sent by post interspersed with telephone contact. Learners who were separated physically likely felt socially and emotionally separate as well. Current technology supports continual contact between teachers and students no matter where they are and what time zone they live in. High interest in technology supported and distributed education has not evolved into an active or intentional e-learning research, development and knowledge dissemination program. The report, entitled "A Review of e-Learning in Canada: A Rough Sketch of the Evidence, Gaps and Promising Directions", became available in June 2006. This comprehensive and timely research review, four-part expert commentary, and response to the
commentary, is a gift from leading Canadian researchers to the international field of educational technology. Given the need for systematic review of research, and the high interest and plethora of work on e-Learning, a special issue makes a valuable and much needed contribution to making sense of and setting a direction for ongoing research in a high priority area of our field.

The review presents findings from an up-to-date, comprehensive examination of e-learning with a special emphasis on Canadian research. Over 700 documents, from research articles to public policy documents to popular public media, are included in this comprehensive and current review of e-Learning in Canada. The review provides a foundation for a debate that includes commentary from four top Canadian researchers, Terry Anderson, Margaret Haughey, Heather Kanuka and Rick Schwier. Implications for K-12, Post-secondary and Policy makers are discussed. While definitive answers about ELearning still remain just out of reach, several key questions provoke extensive discussion in this issue, and also provide a good roadmap for ongoing research in the field.

- What do we mean by e-learning? Does the CCL definition, “the development of knowledge and skills through the use of information and communication technologies (ICTs) particularly to support interactions for learning—interactions with content, with learning activities and tools, and with other people” represent how the field currently defines this phenomena?

- Is it problematic that there appears to be a disproportionate emphasis on qualitative instead of quantitative research in the Canadian e-learning research community?

- Do we have sufficient authority to suggest that particular instructional approaches, like technology, be used in education, and what is the basis of that authority?

- What are the major issues facing Canadian educators and policy-makers who seek to apply e-learning in educational and health institutions and as an avenue for preparing children and adults for lifelong learning?

- What are the fundamental characteristics of successful and unsuccessful virtual learning communities?

- What practices and procedures relating to e-learning use are most effective in promoting learning, and for who?

Social interaction, depth of relationships, community building and trust are not built into communication technology (Norman, 2004, p. 157). Instead, instructional design and ongoing human contact are necessary to enhance the technology, to make it into a touching educational environment. Is it possible, desirable or even necessary to design e-learning environments that excite our emotions? What about the boundaries between home and school, between work and home? Most of us choose when we are available, when we wish to make contact. We can turn off our cell phones or leave them at home. But, what about that internet connection at home and the online courses that many faculty are teaching in Blackboard?

An opportunity to explore a different approach to writing, reviewing and publishing research is the third reason that CJLT is publishing a special issue on e-Learning. This issue builds and extends upon the literature review and peer review processes by making these more public. Normally, an author is not told who has reviewed their manuscript. In the present issue, the authors of the report submitted the work and the editorial team invited commentary. The authors knew who would be responding to their work, and the commentators knew who prepared the review. The final commentary provides the review authors with an opportunity to respond to the reviewers. The anticipated value for readers is that leading researchers in the field are presenting their diverse views on the results of a major research initiative that reviewed e-learning in Canada. From the original idea
proposed by Phil Abrami, to the acceptance by Terry Anderson, Heather Kanuka, Rick Schwier and Margaret Haughey of the invitation to write commentary, to reading each of the commentaries and the response to commentaries, the editor has felt like a child opening precious gifts on Christmas morning.

NOTE: A special issue of CJLT on Knowledge Building, edited by Dr. Bill Egnatoff, Queens University and Dr. Marlene Scardamalia, OISE/Toronto will be published in Spring 2007.

References


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ISSN: 1499-6685