Preface

In the twentieth century, the dominant approach to education focused on helping students build stocks of knowledge and cognitive skills that could be deployed later in appropriate situations. This approach to education worked well in a relatively stable, slowly changing world in which careers typically lasted a lifetime. But the twenty-first century is quite different. The world is evolving at an increasing pace. When jobs change, as they are likely to do, we can no longer expect to send someone back to school to be retrained. By the time that happens, the domain of inquiry is likely to have morphed yet again.

We now need a new approach to learning—one characterized by a demand-pull rather than the traditional supply-push pull mode of building up an inventory of knowledge in students' heads. Demand-pull learning shifts the focus to enabling participation in flows of action, where the focus is both on "learning to be" through enculturation into a practice as well as on collateral learning. (Seely-Brown & Adler, 2008, p.30)

Since the first edition of the *Encyclopedia of Distance and Online Learning*, my colleagues and I have experienced life at "twitch speed," a term coined by Marc Prensky in describing 21st century learners and their learning lifestyle. Most of us who are a little beyond the teen years would presumably be unable to keep up with the pace of new learning, new knowledge gains and, specifically, new technologies that support our new learning. Happily, this is not true! The authors in this second edition of the E*ncyclopedia of Distance and Online Learning* have clearly kept up with the pace and pulse of life in the 21st century educational community.

What continues to surprise many of us who have made the jump to "twitch speed" with its accompanying new technologies and educational delivery/learning environments, is what amounts to a fear of change. Those who tolerate change, or who have some idea of the potential invigorating environment distance and online learning can provide, have moved into the new environments (e.g., web-based learning, Second Life, Vodcasts, and so on) with some sense of enjoyment of the challenges these environments bring to teaching strategies and our definition of "teacher" and "learner" as well as when and how we are "in school." Those who do not tolerate change or perhaps even fear the change associated with distance and online learning, raise issues such as those discussed by Murray Turoff in the foreword to this Encyclopedia.

This atmosphere of resistance from some of the educational community ignores and even denies the fact that we do have something off-balance and even quite limited in the traditional structure of our educational institutions. Our current structure was created, not out of consideration for the future identity of a campus or school poised to enter the twenty-first century, but rather due to financial constraints and convenience of access to education in particular physical locations in communities. Being almost entirely place-bound provides some insight into why many institutions now face a crisis of survival. We could argue from the academic side that this is ultimately a crisis of curriculum, which includes discussions on physical and virtual locations of educational institutions, program and course relevance, right sizing program offerings, etc. But more importantly, we should recognize that this curriculum crisis is based on the changing nature of learning and what it means to be an educated person in the twenty-first century. Thus P-12 schools and post-secondary institutions in the twenty-first century should be considered (among other things of course) as creating critically aligned curricular offerings that provide a rich environment for curricular innovation and creativity, with faculty and leadership well versed in the intricacies of the changing global learning environment.

Intuitively, and based on data available throughout the articles in this edition of the Encyclopedia of Distance and Online Learning, we can see the potential advantages given to moving P-12 and post-secondary learning environments into configurations that provide a rich medium for growth and ability to adapt to the changing needs of twenty-first century living. That is, we expand our sense of the "classroom" to include a variety of locations (virtual and physical), a variety of times (synchronous and asynchronous), and a variable sense of who is teaching and who is learning (social interactions, small groups, collaboratives, cross-cultural communications to name a few examples).

I suggest that what we have collectively stumbled upon is a sense of the evolution of our schools and universities toward a configuration that fosters an environment responsive to the education **demand-pull** described in a recent article in

Educause by John Seely Brown and Richard P. Adler (2008). While not the most elegant or catchy of economic terms, the concept of demand-pull in education is much more accurate than the corporate image of market-driven forces, an image often criticized by faculty for its tendency to encourage band-wagon curricular responses. Rather, Brown and Adler are talking about creating environments that provide the right elements that can readily respond to the real needs of today's learners. This should not be confused with "just-in-time" learning, though there may be some aspects of that embedded. Instead, this is deliberate positioning or repositioning of programs to create a critical diverse learning environment that can respond to the new and large scale demands of living in 2009 and beyond.

This concept is in contrast to what higher education, and indeed much of the P-12 education community often identifies as a birthright: to provide (supply) a body of information or knowledge, assume that this is what is needed for all learners to move from grade 4 to grade 5, from freshman to sophomore and so on...and to push that as our curriculum and expect the enrollments to pull us along into success. That mode of operating, characterized by Brown and Adler as the **supply-push pull** model, is no longer viable today for an entire institution. It may be that delivering knowledge, that is, teaching in the "writing on the blank slate" sense is necessary for some programs, but we should not automatically assume that education operates in this mode particularly when we think, for example, of liberal education as the basis for twenty-first century learning. And it seems that much of the uneasiness about distance and online learning centers around those aspects of P-12 and post-secondary foundations of more advanced learning: the fear is, the novice learner (at any level of being a novice) cannot advance without a supply-push traditional classroom experience. This fear typifies the ongoing struggle between the essentialist and the constructivist assumption about knowledge and learning: in knowing a certain unit of blocks I can pass to you or is it building blocks and what you (and society) can make of it?

It is time for the educational community to reframe the meaning of education and what it means to be an educated person in the twenty-first century. It seems that what we ideally intend to do is to create a basis for learning how to learn, rather than supply what we assume all learners should learn before (push) they begin the real work of learning. Considering how 21st century learners take in information and how quickly that information is used and re-used, it seems our real task is to seek a reinvigorated approach to creating an environment of demand-pull throughout our educational community typical of growing fields. Media, teaching strategies, and delivery modes follow these design changes in curriculum. So, new technologies, distance and online learning, cell-phone group work, social collaborations, and crowd sourcing become part of the repertoire in the rich environment of teaching and learning and not points of contention in an either/or disagreement between those who embrace change and those who do not.

I think the reader will find convincing evidence in these pages! We are excited about the latest release with over three hundred and fifty articles including over one hundred new articles and over one hundred updated articles from the first edition. On behalf of my fellow editors: Gary A. Berg, Judith Boettcher, Caroline Howard, Lorraine Justice, and Karen Schenk; welcome to the *Encyclopedia of Distance and Online Learning, Second Edition*.

Patricia L. Rogers
Lead Editor

REFERENCE

Seely Brown, J. & Adler, Richard P. (2008), Minds on fire: Open education, the long tail, and learning 2.0, *Educause Review*, January/February. Available at: http://connect.educause.edu/Library/EDUCAUSE+Review/MindsonFireOpen-Educationt/45823