Special Issue - Connectivism: Design and Delivery of Social Networked Learning

Editorial

George Siemens
Technology Enhanced Knowledge Research Institute,
Athabasca University, Canada

Gráinne Conole
The Institute of Educational Technology, Open University, UK

New technologies that influence how information is created and shared and how people connect and socialize hold promise for adoption in education. Much like the idea of a book necessitated the development of the library or the idea of structured curriculum and domains of knowledge produced classrooms, the idea of the Internet – distributed, social, networked – influences the structure of education, teaching, and learning. Educators and researchers face a challenge in determining how the existing education system will be influenced and the new roles that will be expected of learners, teachers, and administrators. Information-centric fields such as journalism have struggled with the new democracy of information creation for over a decade. The music industry continues to grapple with access issues and the "unbundling of the album" initiated by Napster and firmly entrenched by iTunes. Telephone companies face an uncertain future as Skype, Google Voice, and other web-based communication services increase in popularity. Essentially, the Internet has remade how society creates and shares content and how people communicate and interact.

The implications for education are significant. Educators have explored the role of the Internet as a research and learning tool for several decades. In the late 1990s, social network services (e.g., Friendster) and easy publishing tools (such as blogs) increased the ability for anyone with an Internet connection to both publish and engage in online conversations. Since that time, we've experienced a decade of amazing innovation in social networking sites (Facebook, Twitter), in openness movements (open source, open access), in mobile technologies (mobile phones, iPads), in the growth of broadband, in gaming, in multimedia (YouTube, podcasts), and in new tools that blend the physical and virtual worlds (location-based services such as Foursquare and Groupon, augmented reality, "internet of things").

This special issue of IRRODL provides an opportunity to step back and reflect on how these dramatic social and technological changes impact education. In 2004, connectivism was presented as a new theory of learning that addresses learning in complex, social, networked environments. Since that time, numerous articles, open online courses, and online conferences have explored connectivism's application in education. As articles in this issue reflect, sharp criticism and support have been offered. We hope this issue will help to advance the discussion, to clarify areas of needed research, and to contribute to ongoing debate about the influence of the Internet on teaching and learning.

The first article by Mackey and Evans, "Interconnecting Networks of Practice for Professional Learning," considers how individuals participate in communities of practice and the activities of individual educators in forming their own networks of practice. The article introduces important points of friction that run through discussions of emerging technologies in education: To what degree can and should learners be autonomous in structuring and pursuing their learning? How do informal and formal learning intersect?

The next article by Rita Kop, "The Challenges to Connectivist Learning on Open Online Networks: Learning Experiences during a Massive Open Online Course," contrasts the *potential* of learning in open and social networks with the reality of literacies, autonomy, and skills of learners as evaluated in a large online course. In order for connectivism to make an impact beyond a small cluster of heavy web-users, skills, literacies, and competencies will need to be defined and developed. Implementing a new approach to learning requires acknowledging and addressing numerous challenges and frustrations on the part of learners.

In "Emergent Learning and Learning Ecologies in Web 2.0," Roy Williams, Regina Karousou, and Jenny Mackness explore the conditions and ecologies that best enable self-organized learning to occur. Their emphasis of the impact of learning ecologies on existing educational practices is an important consideration. Existing practices are systemically embedded. How can institutions move from monolithic systems to learning ecologies?

Diego Ernesto Leal Fonseca, in "EduCamp Colombia: Social Networked Learning for Teacher Training," offers a case study on planning and organizing a learning event on connectivist principles. The description of designing and sustaining an interactive learning environment, where individuals help to shape activities through minimal structure provided by organizers, will be of interest to learning designers. The key question of whether EduCamp activities can "transform practices" is open ended, revealing again the clash between ideal and reality in social networked learning.

Terry Anderson and Jon Dron detail "Three Generations of Distance Education Pedagogy" – behaviourism, constructivism, and connectivism. These different generations are evaluated through the community of inquiry model. Educators will be particularly interested in the discussion on the role of the teacher in connectivist pedagogical models.

In "Connectivism: Its Place in Theory-Informed Research and Innovation in Technology-Enabled Learning," Frances Bell offers a critique of connectivism as a standalone theory of learning. Bell emphasizes a concern that "connectivism is perceived as relevant by its practitioners but as lacking in rigour by its critics." To address the concerns of critics, Bell argues that while connectivism is influential, it will not be perceived as a theory of learning without the development of a substantial research base.

Grainne Conole, Rebecca Galley, and Juliette Culver consider existing and emerging perspectives on networked learning in their article "Frameworks for Understanding the Nature of Interactions, Networking, and Community in a Social Networking Site for Academic Practice." Their article evaluates the suitability of communities of inquiry, communities of practice, activity theory, and actor-network theory as frameworks for evaluating interactions in the social network, Cloudworks.

Andrew Ravenscroft raises the importance of dialogue in "open and ambient" pedagogies in the article "Dialogue and Connectivism: A New Approach to Understanding and Promoting Dialogue-Rich Networked Learning." Ravenscroft acknowledges the growing influence of the Web in society and learning. He emphasizes the importance of recognizing that most interactions are socially based and any theory of learning must account for this dialogical orientation.

In "Proposing an Integrated Research Framework for Connectivism: Utilising Theoretical Synergies," Bopelo Boitshwarelo advances a research perspective that emphasizes design-based research, communities of practice, and activity theory. Boitshwarelo advocates "integrating already established theoretical constructs" in developing research into connectivism.

As the first full journal issue, that we're aware of, devoted to connectivism, this special issue of IRRODL presents a somewhat confusing landscape. Some themes are emerging around the relationship of connectivism to existing theories of learning and social interaction (communities of practice, actor-network theory, and activity theory being most prominent). Critiques of connectivism also reveal themes: the need for ongoing research, the suitability of existing theories in answering the questions that connectivism attempts to address, and the status of connectivism as a theory of learning.

The growing profile of social networked learning in formal and informal learning cannot be ignored. Stuart Kauffman has advanced a concept of the "adjacent possible" to describe biological change. The simple concept is that each development in a species or ecosystem enacts a new range of possibilities that weren't possible before. Applying this notion to education, it becomes clear that the advances of the Web and technology in general have opened new "adjacent possibles," such as thin-walled classrooms, distributed real-time learning, and global social networks. It seems futile to debate the merits of connectivism versus behaviourism, cognivitism, or constructivism. Instead, several questions arise. Which theory best maps to the reality of a particular subject content? Which theory most effectively embraces the adjacent possible of our technologically based society? Which theory best meets current and future learning needs of learners? As editors, it is our hope that the articles in this special issue will

serve in advancing the discussion around existing and emerging theories of learning and in provoking researchers to test assertions of each theory and raise new possibilities for teaching and learning.