

Book review

Learning theory and online technologies

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Harasim, L. (2012). *Learning theory and online technologies*. New York/London: Routledge (pp. 198).

Linda Harasim is a professor in the School of Communication, Simon Fraser University, Vancouver, Canada. She has authored or co-authored more than twenty book chapters, many dealing with online learning or online networks. Her fifth book spans both topics, mapping the development of some major learning theories against the early use of online technologies in education, and then outlining and illustrating Harasim's own theory of online collaborative learning. The book concentrates on adolescent and especially adult learning. The author's choice of theories and examples clearly presume an audience rooted in Western, non-indigenous education.

The use of sweeping generalisations about the backward state of online educational practices may annoy educators currently engaging in innovative online teaching, and potentially alienate educators who are not major users of technology. Fortunately, this detracts little from an otherwise solid introductory chapter that offers a useful overview of the book's structure.

In the first half of the book, Harasim gives a very good outline of the historical development of some key theories of learning (behaviourism, cognitivism, constructivism), introducing the main ideas by explaining the research of the key founders of each theory. She draws links to the computer-assisted technologies available at the time each theory started to affect education, showing their influence on the use of the technologies. Harasim sees the mission of teachers and learners as advancing the conversation of humankind (p.174)—hence her presentation of online technologies in the context of the history of the development of human communication technologies, and the history of the development of theories of learning. However, I think even a brief consideration of contemporary takes on these theories would have added value.

In Chapter 6 Harasim suggests we need a new theory of learning “that can take into account the ubiquity of the Internet and the societal shift toward collaborative learning emphasizing the building, rather than the transmission, of knowledge” (p. 80). Behaviourism and cognitivism see learning occurring in the transmission of teachers' ideas to students. Constructivism is also found wanting, due to its emphasis on self-focused, rather than socially centred, active learning. Harasim's solution is an Online Collaborative Learning (OCL) theory that emphasises students' developing skills to collaboratively address and solve real social issues and problems.

At the heart of the author's OCL theory is a three-stage process of collaborative discourse: *idea generating*—brainstorming, expressing divergent views; *idea organising*—sifting and evaluating ideas; and *intellectual convergence*—generating shared understanding or synthesis (this can include agreeing to disagree, or co-production of, for example, solutions, artifacts, articles, theory). Harasim distinguishes between cooperative learning, where each student contributes something to a final group product, and collaborative learning, where student groups discuss and work through the process together to reach an outcome. “The process itself is collaborative, not just the product” (p. 92). The teacher's role is to link students to the knowledge community of their discipline. I wondered here about teachers' responsibilities—given the interdisciplinary nature of many real problems, and the significance to collaboration of peer expertise and effort, for example.

Chapter 7 presents four scenarios of OCL-based application of online technologies for learning. Three scenarios cover case studies, student group-led seminars and a collaborative training programme. The fourth scenario also features examples clearly underpinned by OCL, namely multi-user games in which students collaborate to solve problems in a simulated world. However, the examples of immersive simulations, including flight and surgery simulator training, do not appear to require collaboration and seem instead to be underpinned by an objectivist theory of learning such as behaviourism. I would have liked to see Harasim consider whether collaborating with a computer program that simulates a person (rather than an avatar controlled by a person), could count as adequate or beneficial for learning under her OCL theory.

Chapter 8 purportedly features case studies of online non-formal education, but many of these appear to present institutions that offer formal education. The most interesting, to my mind, discusses the measures taken by the International Labour Organization to meet the needs and preferences of a diverse student base, some of whom had serious issues with internet access. The chapter ends by referring to a large-scale study in which faculty noted some barriers with regard to implementing online learning that could be alleviated at an institutional level. It would have been good to see a more detailed discussion of these issues.

Harasim emphasises that a theory of learning is based on empirical evidence, and says that OCL theory is based on decades of research and practice from around the world (p. 81); but she does not cite specific empirical studies to support her theory. She does suggest that, compared with earlier theories, “new models of learning are based less on clinical experiment and are more field-oriented” (p. 170), thus supporting my impression that her OCL theory is based on her own (considerable) teaching experience, experimentation and scholarship, and networking with other practitioners.

Despite at times addressing education practitioners, the book lacks sufficient ‘how to’ guidance for this audience, and is too introductory for researchers. However, it clearly states its intention to be a textbook for education and communication students, and especially educational technology students; and I would recommend it as such. There is a helpful glossary and extensive index, and the smattering of diagrams provides clear and useful overviews of concepts, theories, and states of affairs. Each chapter in the body of the book is clearly laid out, from the listing of topics covered in each chapter, through reintroducing key ideas from previous chapters in the context of the new chapter, to the summary of the chapter’s main points at the end. These techniques enable each chapter to be read as a stand-alone piece, which is helpful when assigning chapters as course readings (although if the book is read comprehensively, the repetition can start to grate). Finally, the hardcopy uses a small, closely-spaced font that is tiring to read, so interested readers may prefer the e-book version.