

> Invited Speaker-presentation, Thursday 22.4.2010, at 14.45-15.15

Connectivism in Practice: Critical Thinking as a Distributed Course **Senior Research Officer *Stephen Downes*, National Research Council Canada**

Drawing from two years of experience offering the 'Connectivism and Connective Knowledge' course in a distributed online environment, the National Research Council's Personal Learning Environment (PLE) project is expanding the model to courses outside the discipline of education. Specifically, Stephen Downes and Rita Kop - who have both offered Critical Thinking courses through more traditional online and offline means, are adapting this material to the distributed model.

The purpose of this course is two-fold. First, the design of the course is based on an understanding of the skills and capacities required to effectively learn using a PLE. Second, the offering of the course is intended to test whether learners can employ a PLE environment in order to develop those capacities. Thus, combined, the objectives of the course are intended to demonstrate whether learning may be bootstrapped with a PLE, or whether an additional pedagogy is required prior to the use of a PLE.

Content for the course is being drawn from the presentation 'Pedagogical Foundations for Personal Learning'. <http://www.downes.ca/presentation/237> This presentation provides a frame for an understanding of the critical literacies required in a networked learning environment. Briefly, the elements are as follows:

Syntax – the ability to recognize and use forms, grammars, patterns and other structural properties of communication

Semantics – the ability to connect communicative elements to underlying purposes, goals, objectives, theories or meaning, denotation, reference, truth and understanding

Pragmatics – the capacity to use communicative elements in actions, or to take actions using communication, to express, commit, interrogate, and engage in interactions

Cognition – the capacity to infer, or detect faulty inferences, to use communicative elements in order to describe, argue, explain or define

Context – the capacity to locate a communication in a wider environment, to understand the impact of this environment on semantics and pragmatics, and to assemble and understand sets of communications as expressive of frames, world views, or deontological constructs

Change – the capacity to reason dynamically, to detect and comprehend processes and flows, to understand the impact of progressions and differences, to reason employing dynamic events such as games and simulations

As mentioned, the structure of the course is based on the pedagogical model employed in the Connectivism and Connective Knowledge course offered in 2008 and 2009. It is within such a model that a learner is expected to exercise the capacities described above.

The connectivist model envisions a learning network, based on the model of the personal learning environment, in which each learner aggregates and works with a unique set of resources; though there may be a central theme or structure offered by the instructors, there is no particular body of knowledge or information expected to be acquired by learners; rather, learning occurs as a result of interaction and participation in the distributed community, completion of authentic tasks within that environment, and the growth and development of the learner's own capacities as a consequence. The course design, therefore, is that essentially of a community of learners who are learning to learn.