



Institute of Cognitive Science (ICS)

Our next colloquium talk of 2013-2014:

Cognitive modelling of early music reading skill acquisition for piano: A comparison of the Middle-C and Intervallic methods

a talk given by Dr. Bruno Emond

of the National Research Council

and Dr. Dr. Gilles Comeau

of the University of Ottawa

this Thursday, October 24th from 12-1 pm

There will be light refreshments before the talk.

in room 2203 of Dunton Tower

Everyone is welcome.

In the classical music tradition, knowing how to read music is an essential skill and is seen as a fundamental component to develop when learning to play the piano. This research's focus is to study the possible impact of two different teaching approaches to the acquisition of initial reading skills.

By using cognitive modeling, we are hoping to observe through computer simulation the problem solving and decision-making tasks involved in decoding a simple musical score. Our model intends to capture a novice initial coordination of music reading and motor operations on a piano keyboard. As such, it does not aim at modelling advanced sight-reading skills. The paper introduces the Middle-C and Intervallic methods followed by a description of an ACT-R cognitive model and simulation results upon learning with each of the reading methods.

Inspection of the simulation results reveals differences in terms of declarative memory and cognitive processing demands. In particular, the Intervallic method requires a larger number of declarative knowledge related to notes, and more execution planning than the Middle-C method.

Colloquium Coordinators:

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