Minutes of Cognitive Assessment Committee Meeting

Date: Tuesday, April 3, 2012

Time: 11:00 AM – 12:00 PM

Location: BS 224B

Members Present: Alan Kersten, Chair; Elan Barenholtz; Sang Wook Hong

1. Discussion of assessment data from 2005 – 2010 for the undergraduate cognition course (EXP 3505).

Five years of previously-collected assessment data were analyzed by the committee members. The only clear trend that was evident was an increase in performance from the 2005-2006 Academic Year to subsequent years. No clear trends were apparent after this initial increase in performance. The committee members were concerned that the lack of clear trends may reflect the nature of the assessment procedures, which involved instructors of classes selecting their existing test questions that mapped onto the different assessment outcomes. Thurs, different test items were used by different instructors. Because the cognition course was taught by different instructors in different years, the fluctuations in performance may reflect the different test questions that were used in different years. Because of this ambiguity in interpreting the existing assessment data, no changes were recommended for the assessment outcomes or pedagogical practices for the Cognition course.

1. Revisions to existing assessment procedures

Because of the difficulties in interpreting the existing data, the Chair proposed that the assessment procedures be changed to include a common set of test questions assessing the different outcomes. The committee members compiled a list of topics that map onto each of the assessment outcomes. The committee members agreed to each generate one test question for each of these topics and to email it to the chair. The Chair will then distribute the set of test questions generated for each topic, with the goal of finding two or three test questions for each learning outcome that everyone could agree upon. The set of topics selected for each assessment outcome are listed below.

Assessment outcome #1 (History and theoretical approaches to cognition):

Principles of behaviorism

The cognitive revolution

Assessment outcome #2 (Scientific methods of theory testing in cognitive psychology)

Psychophysics

Action potentials

Neuroimaging methods

Assessment outcome #3 (Perception)

Gestalt principles

Sensation vs. perception

Top-down vs. bottom-up processing

Assessment outcome #4 (Attention)

Resource limitations

Late vs. Early selection

Feature integration theory

Assessment outcome #5 (Memory)

Atkinson-Shiffrin model of information processing

Multiple memory systems (e.g., episodic vs. semantic or Explicit vs. implicit)

Reconstructive memory

Assessment outcome #6 (Language)

Chomsky’s theory of a Language Acquisition Device

Categorical perception of speech sounds

Sentence parsing

Assessment outcome #7 (Higher-order cognition)

Family resemblance theories of categorization (e.g., prototypes)

Inductive vs. deductive reasoning

Heuristics (e.g., availability, representativeness)

1. Meeting adjourned