Learning Goals

Concentrators (and special majors) should be able to:

1. Connect, compare, and contrast different disciplinary views on the nature of mind

2. Appreciate the interdisciplinary nature of cognitive science, and understand the role(s) played by contributing disciplines

3. Read and understand relevant primary literature

- 4. Locate and access relevant literature through electronic databases
- 5. Collect and interpret empirical data
- 6. Analyze arguments in the field of cognitive science

7. Propose, write, and present a thesis on a relevant topic that can be read by faculty readers in different disciplines (special majors only)

Assessment Plan

Goals 1, 2, and 6 are, by their very nature, broad in scope and transcending any one course or any one assignment in any one course. Given that breadth, it makes the most sense to assess these in either a senior exit survey, or in a written survey instrument. This year, I opted to survey our senior special majors with an open-ended invitation to read through our (old) program goals and reflect on them. The small number of our majors (3) and our concentrators (also 3) really preclude drawing definitive conclusions from their responses, but feedback is always good.

In any event, I will plan to collect broad exit-interview feedback from seniors (going forward, concentrators) every year. The number of our concentrators grew this year (seven sophomores declared the concentration), so I am optimistic that trends will be able to be seen after a few years.

I may also experiment with adapting a new instrument I am using in some longitudinal research with first-year students. My research team and I have created an instrument we call the "Academic Experiences Survey" and it consists of 5 scales: **Comfort** (feeling at ease, engaged, and comfortable at Carleton); **Skills** (feeling mastery of writing, critical thinking, reading, etc.); **Future orientation** (making course and major choices with an eye toward future goals); **Interdisciplinary understanding** (seeing connections among and across different disciplines); and **Liberal arts understanding** (understanding what and how different disciplines contribute to a liberal education). Prelminary analysis indicates excellent internal reliability for four of these scales, and significant test-retest stability across a three-month period. For "fun," I gave this instrument to the 3 senior special majors and the 3 senior concentrators, and observed higher

means for them (relative to the larger sample of first-year students) in scores for the Skills, Interdisciplinary, and Liberal arts scales, although the differences were not statistically significant (likely due in large part to the small sample of seniors). Some adaptation of the instrument may be possible in future years.

Goals 3-5, being more focused, are assessable through assignments given in CGSC 232/233, the single required course for all concentrators (going forward). I have a rubric which I use to assess papers (attached). This rubric, along with extensive in-line comments on the three papers produced, is used to give feedback to students. Because I use the same rubric for all assignments, I can measure whether or not there are positive trends in learning (this is made a little more difficult by the fact that papers are often jointly authored). This year I compared the ratings on the second and on the final papers; noting positive change scores in items 1-8, 10, 14-15, 17-18, and 21. Particular large gains were seen in ratings in items 8 and 10, which pertain to the writing of method sections, something on which the laboratory course focused heavily. The pattern of ratings will help me refine the teaching of this course.

This rubric was not developed with program assessment in mind, and I will be exploring ways of refining it toward that end over the next year. For the moment, I would say that items 3-5 address goal 3 fairly directly and address goal 4 indirectly. Items 6-15, taken together, address goal 5. I do have another assignment that addresses Goal 4 directly; I did not keep the assessment sheets for that one this year, but will in the future.

Goal 7, pertaining to comps, is a goal that may be moot after this year. We had decided to stop accepting special majors, due to a variety of administrative factors, two years ago. The change in my FTE allocation has prompted us to rethink this, but as of the date of this writing there are no more special majors in the program. Goal 7 was assessed holistically by both the thesis advisor and second reader of each paper, who came from different disciplines. If we return to accepting special majors, I will work on a more formal rating sheet for use by the readers of the theses in the future, and I will write it to speak very directly to Goal 7.