Background and Goals
During the 2012-2013 academic year, CSUEB joined other CSU campuses in assessing critical thinking, one of the WASC core competencies and one of our own institutional learning outcomes. Building on critical thinking assessment work done by the GE subcommittee in winter and spring quarter 2013, Sally Murphy (GE subcommittee chair), Aline Soules (University Libraries), Julie Stein (Department of General Education), Larry Bliss (Academic Advising and Career Education director), Mitch Watnik (Department of Statistics and Biostatistics), and Sarah Nielsen (Department of English) met from 9am to 4pm on July 30, 2013 to pilot a critical thinking rubric developed to assess first-year critical thinking outcomes. The argument essays assessed during the July 30 session were written by students in a mega section of Philosophy 1000, Workshop in Clear Thinking, taught by Professor Jennifer Eagan. Just over half (44/82) argument essays were scored and discussed at the session. It should be noted that this sample may not be representative of students in PHIL 1000 since the mega section had 82 students. PHIL 1000 sections are normally run at 35 students in order to allow for more faculty-student contact and feedback on course papers.

The goals for the first-year critical thinking assessment session were as follows.
1. Pilot the new rubric developed for first-year critical thinking outcomes and identify aspects of the rubric that need to be revised.
2. Find sample papers at each level on the rubric. These papers and the rubric can be shared with other faculty and staff members who plan to assess critical thinking in lower-division courses or in co-curricular activities with lower-division students.
3. Identify patterns in student learning and needs as they relate to critical thinking.

Assessment Procedures
At the July 30 assessment session, the following procedures were used.
1. Review and discuss argument essay assignment from Philosophy 1000.
2. Review and discuss the pilot critical thinking rubric.
3. Read and score one set of 10 papers, taking notes on the features of each paper that stand out for the reader. (Please see sample score sheet at the end of this report.)
4. Report scores and discuss set one, 3-4 papers at a time.
5. Repeat steps 3 and 4 with 10 more papers.
6. Repeat steps 3 and 4 with 20 papers.

Outcomes
Rubric Revisions: The first-year critical thinking assessment team identified a number of aspects of the pilot rubric that should be revised. These are listed below.
1. Reasoning (fallacies, analysis, etc.) needs to be more clearly described in the rubric.
2. The concept of ethical use of information needs to be clarified and carried through the whole rubric. The word ethical should be replaced with something like appropriate or
relevant because the word "ethical" has a specific contextual meaning that is not evident from the phrasing.

3. The third criterion on the rubric should be revised to include language about variety in arguments.
4. Development of ideas needs to be included in the rubric.
5. Some criteria in the rubric may need to be combined as reasoning and development descriptors are expanded or added.
6. Reverse the level descriptors on the rubric so that the high score is next to the rubric criteria.
7. Edit typos.

Identification of sample papers: Papers that received the same score from at least 5 of 6 readers were considered for possible inclusion in a set of papers to be shared with other faculty and staff assessing critical thinking in lower-division students. The assessment team identified several possible sample papers at level 2/Developing and level 3/Proficient on the rubric. They also identified one sample paper at level 1/Novice. No sample papers at level 4/Advanced were identified during the assessment session.

Patterns in student learning/needs: The assessment team identified the following patterns in student learning and needs as they relate to critical thinking.
  1. Almost all students stated their own position on an issue/problem clearly.
  2. Most students were able to acknowledge at least one claim that conflicted with their position on the issue/problem.
  3. Almost all students had difficulty establishing the credibility of the source(s) used in their argument.
  4. Many students had difficulty developing their ideas, either failing to explain the significance of the evidence they presented or making claims without providing sufficient evidence.
  5. Although attempts at counter-arguments were present in many student papers, writers often had difficulties refuting claims on the other side, using the counter-argument to further their own position, and/or identifying the assumptions of people with a different perspective on the issue/problem.
  6. Providing relevant contextual information was difficult for many students.
  7. Describing the relationships between the issue/problem and conclusions, consequences, or implications was difficult for many students.
  8. Many students seemed to struggle with narrowing an issue/problem appropriately for the argument essay assignment.

Next Steps
The first-year critical thinking assessment team identified a number of areas that they will continue working on this summer and fall. These are listed below.
  1. Revise the first-year critical thinking rubric based on the pilot findings. Specific revision areas are listed in the outcomes section above.
  2. Find or create at least one level 4/Advanced paper to share with other faculty/staff.
3. Use sample papers identified during this pilot as norming papers with the full GE subcommittee in fall 2013. After a norming session with these papers, the remaining Philosophy 1000 papers will be assessed by the GE subcommittee.

4. Create a faculty and staff resource packet or Blackboard space which will include the revised lower-division critical thinking rubric, a sample assignment that was used to assess critical thinking, and sample papers at each level on the rubric with explanations of the scores.

5. Share the findings of the first-year critical thinking assessment pilot with the larger campus committee in order to better address the needs of lower-division students.

6. Consider re-doing the assessment in two or three smaller sections of PHIL 1000 since the mega section of PHIL 1000 where the assessment took place was not representative.

Sample scoring sheet used for standard setting/range finding:

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<th>NAME or Paper ID</th>
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