**2013-2014 Institutional Assessment of Critical Thinking**

Summary report submitted by Jim Taylor (Professor of Philosophy and Lead Assessment Specialist for Critical Thinking), October 7th, 2014 (See complete report for more details.)

Westmont’s commitment to critical thinking is represented by our institutional learning outcome that *Westmont graduates will accurately evaluate the strength of evidence in support of a claim.* Our institutional assessment efforts in 2013-2014 were devoted to investigating how well our students are doing in the area of critical thinking.

The Critical Thinking Assessment Team administered the 15-question short-answer “Critical Thinking Assessment Test” (the CAT) to over 90 seniors in senior seminar classes during the spring semester of 2014. The Assessment Team and some additional faculty and administrators spent a day scoring 72 of the 90+ CATs. The students whose CATs we scored comprise nearly 20% of the 2014 Westmont graduating senior class. A comparison of our sample’s average ACT and SAT scores and GPAs with the test scores and GPAs of the 2014 graduating class shows that the sample is representative of the entire class of 2014. See “Summary of CAT Scoring Debriefing Session” for our post-scoring reflections.

Given the average entering SAT score of the Westmont students who took the CAT (1199), the Westmont average CAT score is 93.4% of the average national CAT score achieved by upper division students with the same SAT score. But though our students did somewhat less well overall than the national norm for students with the same SAT score, they did generally as well as or better than all students who have taken the CAT, regardless of SAT score. Overall, our students performed as well as or better than the national average on each CAT question except one. See “Upper Division CAT Mean Comparison Report.”

The Team recommends that the Academic Senate (1) select 3-4 critical thinking skills from the list of those it would be good for our students to improve (the Team recommends #s 7, 10, 11, and 13, since they are the skills the test results suggest our students need to improve most); (2) identify a course or courses in which focused instruction could be given for the improvement of these skills (the Team recommends a GE course from each of the three divisions such as PHI-012, CHM-005, and SOC-001); (3) secure the faculty members who are willing to teach those skills in those courses; (4) provide those faculty members with the resources they need to implement this skill instruction effectively; and (5) arrange with the Center for Assessment & Improvement of Learning to have an adequate number of CATs for pre-tests and post-tests in these selected courses. The Team also recommends that the Academic Senate (6) consider changing the Critical Thinking ILO to make it more inclusive of a broader range of critical thinking skills.

Since the focus of our critical thinking assessment was on the entire institution rather than on individual academic divisions and departments, this report does not include a discussion of CAT results by division and department. But those results are available in the documents entitled, “Total CAT Score by Division with National Comparison” and “Total CAT Score by Department with National Comparison” for departmental use.

**Summary of CAT Scoring Debriefing Session**

Suggestions:

* Identify which of the 15 critical thinking skills are most in need of improvement.
* Identify which skills should be taught at the GE (perhaps lower division) level.
* Identify which of the 15 skills are essential for each discipline.

*Assignments*

* Develop open-ended assignments (upper-division classes).
* Make values embedded in assignments explicit (ask students to identify the values).
* Promote deep level reading and thinking about questions like those in the test.
* Provide information overload by giving students more information than they need so that they can determine which information is relevant and which is irrelevant.
  + Add distractors to assignments and tests.
  + Develop assignments that have multiple answers instead of single solutions.
* Provide a safe environment to fail, and discuss what students learned from failure that might help them succeed in real world settings.

*Rubrics*

* Provide a rubric early on or engage students in creating the rubric so that students know what they are shooting for.
* Provide samples of good and outstanding products for students.

*Tests*

* Conduct a diagnostic assessment at the beginning of a term.
* Write clear specific prompts.
* Ask students to explain reasoning behind an answer.

Questions:

* What kinds of assignments are more likely to provide opportunities for students to develop critical thinking skills?
  + Experts recommend these generic critical thinking training methods:
* service learning
* debates
* simulations
* case studies
* real world problem solving tasks
* involving students in real research
* Where and how can we incorporate methods that develop critical thinking skills?
  + Research suggests that the CT skills should be intentionally taught.
  + GE courses?
  + Internships?
  + Capstones and senior seminars?
  + Co-curricular activities
  + *Concern*: Some courses cover so much information that it’s challenging to incorporate critical thinking tasks that take additional time (e.g., science).

