

REPORT TO THE ASSESSMENT COUNCIL, PORTLAND COMMUNITY COLLEGE

BY THE PSYCHOLOGY SAC

MAY, 2010

This report summarizes recent efforts by the Psychology SAC to respond to the Assessment Council's goal of measuring PCC students' skills in the cognitive domain of critical thinking.

In Winter quarter 2009, the Psychology SAC administered a 33-question survey to students enrolled in Psychology courses at PCC that term. The survey aimed to measure students' progress toward several course, program, and PCC Core Outcomes. This survey was delivered and completed in an online format, with the hopes of easing both data gathering and analysis. Every student enrolled by the end of the first week of the term was invited to take the survey. Over 2500 invitation emails were sent to students, and approximately 1000 students completed this initial survey. During the 10th week of that term, the same survey was again offered to approximately 2500 students, and about 950 completed this second, post-test survey. Factor analysis of the data identified six survey questions relevant to assessment of critical thinking.

On the first survey, 959 students completed all six critical thinking questions, and on the post-test survey, 776 students completed the same six questions. Of this sample, 494 students completed these six questions on both the pre and post surveys. Ron Smith, Ph.D., of PCC's Institutional Research Department, created a composite score of students' responses on these six items, and also calculated "change scores."

Results showed that the mean self-reported improvement on these critical thinking items was highly significant ($p < .0001$), and that approximately 80% of these 494 students indicated at least a slight improvement in their perceived critical thinking abilities.

While the Psychology SAC members were generally happy with these results, we recognize many limitations to these survey efforts. Along with the obvious problems that occur with any self-report methodology, we have discussed concerns about the independence of our questions, and the need to construct better questions to measure a domain as ambiguous as critical thinking. We will certainly be addressing these issues as we look to replicate a version of this survey as our next program review approaches in 2013.

At the same time that the Psychology SAC conducted this survey, some members of the SAC also conducted more in-depth, qualitative research which attempted to assess our department's success in meeting larger systemic goals. 36 students in 200-level psychology courses participated in a lengthy survey containing 10 open-ended questions designed to elicit specific examples from students that demonstrated their perceived outcomes in one or more psychology courses. One of those questions asked students if the psychology courses they had taken at PCC impacted their critical thinking skills, and if so, to cite specific examples. 100% of students who answered this question reported improvement, with most of them offering

examples of improvement in terms of overcoming a variety of cognitive and emotional biases, as well as understanding the scientific method.

The Psychology SAC has discussed other avenues to explore regarding the assessment of critical thinking. SAC member Monica Schneider-Anthony recently completed a course devoted to integrating critical thinking tasks into classroom activities and assignments. A copy of one of her assignments is attached to this report as an Appendix. Several other SAC members have expressed an interest in learning from Monica's experience and adding such activities to their courses.

In conclusion, the Psychology SAC at PCC views the efforts described above as imperfect, initial attempts at assessing critical thinking. We anticipate that in the next several years we will refine our methods and create more effective measurements of critical thinking. We are, as a SAC, indebted to the work of Ron Smith, whose contributions were critical to the creation and successful completion of our survey.

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For the Psychology SAC at Portland Community College

APPENDIX—CORE OUTCOMES ASSESSMENT
MONICA SCHNEIDER-ANTHONY, Psy.D.



CORE OUTCOMES CRITICAL THINKING ASSESSMENT 2010

Monica H. Schneider, PsyD

1. What is the purpose?

Assess the student's competency in investigation and integration and communication of reliable and valid research in subject matter in Human Development

2. Who is the audience?

32 members of Psychology 215 Human Development Winter Term

3. Results of the assessment are presented in the form of written feedback and points earned on Take Home Test 2.

4. Operational Definition: Critical Thinking suggest that a student can:

- A. find and investigate reliable and valid research on subject matter in Human Development**
- B. integrate and assimilate reliable and valid information**
- C. demonstrate consideration for context and multicultural variables**
- D. communicate reliable and valid information as if in a professional role**

5. Take Home Test 2 is a sample of assessment for Critical Thinking per the operational definition described above. Other assignments ask students to consider multiple variables that impact human development. Examples are heredity, ethnicity and culture, poverty, stress, and availability of professional services. Metacognitive skills are ways to challenge students to investigate context as a variable in human development. This means the student recognizes stages and expectations of human

development but adds to this recognition the multiple variables of context or circumstances.

Students in this course often select roles such as nursing, teaching, counseling, and nutrition as a profession in addition to application to parenting their own children. The assessment in Take Home Test 2 asks them to select a role and an audience they report their information to such as a parent. The assessment is observing the competency to find and communicate information that is pertinent to their “child” and consider the variables that impact that child. In doing so they are acting as they may on the job; as a resource and educator.

Rubric The rubric offers feedback on the degree the student met the expectations. Written comments are made on the report turned in by the student. Such comments offer constructive criticism and suggestions that support developing professional competencies and proficient role performance.

- 6. Each chapter of the text describes a different stage of development. The text includes variables that can impact that stage of development. These points are emphasized in class lectures and in-class assignments.**

The assessment design in Take Home Test 2 appears appropriate for Psy 215 as most students are preparing for a professional role. They are acquiring core knowledge about human development but need to see how the knowledge is applied as in this assignment. Most students regard this assignment as interesting and were motivated by the form of assessment as they could see themselves implementing such a task in the future. The assignment offered choices yet kept to the same expectations that they become subject matter experts.

Suggestions to improve this assessment would be to make the rubric more detailed and specific. One model may be to use a designation for having met the requirements but more points are awarded for exceeding the requirements.

Most students are not familiar with APA citations and how to report research. This may be a portion of a class I need to offer before the assignment of this test.