Annual Report for Assessment of Outcomes 2012-13

Subject Area Committee Name: Health

Contact person: Michael Meagher

For LDC/DE: Core outcome(s) assessed: Critical Thinking & Problem Solving and Self Reflection

For CTE: Degree or certificate* assessed: _____

*please attach a table showing the alignment of the degree or certificate outcomes with the College Core Outcomes

Please address the questions below and

send to *learningassessment@pcc.edu* by **June 21, 2013** with Annual Report in the subject line

Note: Information provided in this report may be inserted into or summarized in Section 2C Program Review Outline.

1. Describe <u>changes that have been implemented</u> towards improving students' attainment of outcomes that <u>resulted from recent outcome assessments</u>.   These may include but are not limited to changes to content, materials, instruction, pedagogy etc. Please be sure to **describe the connection** between the assessment results and the changes made.

> In the 2011-2012 Community and Environmental Responsibility Outcomes report, we identified changes that should be made to the HE 278 Behavior Change Project as a result of the assessment. These changes included editing and rephrasing some of the assignment questions to encourage further self-reflection and awareness of how the student's behavior change impacts the community and the environment.
>
> For example, several changes were made in Step 1 of the assignment to encourage students to brainstorm different behaviors they can change for themselves AND the earth. Often students were selecting individual behaviors that did not impact the environment or they did not address how the behavior impacts the environment. A list of potential behaviors that impact both students' health AND the physical or natural environment are now listed as examples for students to review in Step 1 of the assignment. Also, in Step 1 students are more explicitly asked to address how the behavior impacts both individual and environmental health.
>
> In addition, in Step 3, the Reflection and Summary Paper, before the changes, students were asked to, "describe how this one behavior as the potential to reduce the risk and/or promote the health of the individual, the community and/or the environment". We edited this question to have three explicit parts, where students reflect on how the behavior reduces the risk and/or promotes the health of the individual (part a), the community (part b) and the environment (part c). We also made this same revision in Part B of the assignment.
>
> These changes have been implemented in the face-to-face course. Although we have not formally assessed the changes, instructor feedback has confirmed that students' self-reflection and awareness has deepened and students are more aware of how the behavior change impacts the community and the environment. These changes will also be made in the D2L SAC shell.

For <u>each outcome assessed this year</u>:

Critical Thinking & Problem Solving

2. Describe the assessment design (tool and processes) used. Include relevant information about:

- The nature of the assessment (e.g., written work, project, portfolio, exam, survey, performance etc.) and if it is direct (assesses evidence mastery of outcomes) or indirect (student's perception of mastery). Please give rationale for indirect assessments (direct assessments are preferable).
    - o HE 213: Men's Health had a revision during Summer 2012. The SAC planned on creating a large project grounded in the Critical Thinking and Problem Solving (CT&PS) Core Outcome that could then be assessed for the purposes of this report. The team started with the Core Outcome and worked backward to create a project that would address the aims of the CT&PS Core Outcome.
    - o The assignment requires students to utilize the Centers for Disease Control and Prevention (CDC) website to access primary morbidity and mortality data sets, focused on males, on topics that interests them most. Students then review, interpret, describe, and apply the data to the class. Finally, students are asked to propose logical next-steps to further investigate the topic of their choice. How students completed the assignment, responded to questions, and provided supporting evidence was the basis of evaluation.
- The student sample assessed (including sample size relative to the targeted student population for the assessment activity) process and rationale for selection of the student sample. Why was this group of students and/or courses chosen?
    - o The SAC plan was to assess the first ten student work samples, alphabetically ordered by last name, for each section of HE 213 taught (Three Distance learning, three Face-to-Face/Hybrid). The assignment was only used in the online sections of the class. This resulted in the sample size to equal thirty (approximately one-third the class), ten samples from the Fall, Winter, and Spring quarters DL HE 213.
- Any rubrics, checklists, surveys or other tools that were used to evaluate the student work. (Please include with your report – OK to include in appendix). Where appropriate, identify benchmarks.
    - o A blended rubric using components from the AACU Critical Thinking and Problem Solving rubrics was created to evaluate the student work. (Refer to Appendix A). Additionally, the team intentionally used the PCC Core Outcome benchmarks (http://www.pcc.edu/resources/academic/core-outcomes/co-criticalthinking-problemsolving.html) when developing the project itself.
- How you analyzed results, including steps taken to ensure that results are reliable (consistent from one evaluator to another.
    - o One instructor who taught the three Distance Learning sections completed the analysis resulting in reliability.

3. Provide information about the results (i.e., what did you learn about how well students are meeting the outcomes)?

- If scored (e.g., if a rubric or other scaled tool is used), please report the data, and relate to any appropriate benchmarks.
    - o In applying the Critical Thinking and Problem Solving Core Outcome Rubric (Appendix A):
        - Explanation of issue (CT)
            - Range 2 – 4
            - Average 3.8
        - Evidence (CT)
            - Range 2 – 4

- - - • Average 3.7
      - ▪ Identifies connections and relationships (CT)
        - • Range 2 – 4
        - • Average 2.9
      - ▪ Proposed Hypothesis (PS)
        - • Range 2 – 4
        - • Average 3.2
      - ▪ Identify Strategies to evaluate (PS)
        - • Range 2 – 4
        - • Average 3.4
- • Results should be broken down in a way that is meaningful and useful for making improvements to teaching/learning.   Please show those specific results.
      - ▪ Explanation of issue (CT) – students do this well; the direct questions and samples provided assist students in achieving this
      - ▪ Evidence (CT) – students do this well; models, samples, and direct questions assist students
      - ▪ Identifies connections and relationships (CT) – this is a higher-thought question which asks students to draw on the previous course work to make connections with their findings; there is usually a dichotomy where students either take the time to make the full connections <u>or</u> the do the bare minimum to put something into the space
      - ▪ Proposed Hypothesis (PS) – students do this well, though more comprehension might be necessary. SAC might consider providing other samples or models. There isn't another point in the course where students are asked to directly propose a hypothesis based on ethical, logical, and cultural dimensions; but students are provided opportunity to reflect on the multi-dimensions of health and wellness (which include them)
      - ▪ Identify Strategies to evaluate (PS) – students are asked similar questions in prior assignments which might explain the higher average; Consider re-wording to make it match the pattern of the questions students are accustomed to

4. Identify any changes that should, as a result of this assessment, be implemented to help improve students' attainment of outcomes. (These may include, but are not limited to, changes in curriculum, content, materials, instruction, pedagogy etc).
   - • As a result of this assessment, it is recognized that more detail and information is needed to help the students understand and appreciate the concept of 'Crude Rate', which is critical when assessing population-sized data. This change will occur over Summer 2013 to begin Fall 2013. This will include a presentation, discussion, and application of the concept.

For <u>each outcome assessed this year</u>:

Self-Reflection

During the Fall 2012 SAC in-service, HE faculty members met to discuss core outcomes. During this meeting, the topic of Self Reflection was addressed. Members of the HE SAC each discussed the topic and provided further details on how Self-Reflection was incorporated as a learning tool in the classroom and how the outcome was evaluated and how assignments were modified to develop and encourage expression of higher levels of mastery of self-reflection.

2. Describe the assessment design (tool and processes) used. Include relevant information about:

- The nature of the assessment (e.g., written work, project, portfolio, exam, survey, performance etc.) and if it is direct (assesses evidence mastery of outcomes) or indirect (student's perception of mastery). Please give rationale for indirect assessments (direct assessments are preferable).

- The student sample assessed (including sample size relative to the targeted student population for the assessment activity) process and rationale for selection of the student sample. Why was this group of students and/or courses chosen?

- Any rubrics, checklists, surveys or other tools that were used to evaluate the student work. (Please include with your report – OK to include in appendix). Where appropriate, identify benchmarks.

- How you analyzed results, including steps taken to ensure that results are reliable (consistent from one evaluator to another.

See Appendix B

PROCESS:
To complete the assessment for student self-reflection, 6 HE Faculty (3 PT and 3 FT) from 3 different campuses evaluated identical sections from two (2) different HE 242, Stress and Human Health, assignments through application of the provided Self-Reflection Rubric. The assignment section received five (5) individual scores, one for each of the 5 components of self-reflection. The 5 individual component scores were tallied to arrive at a total score which was used to identify the students' demonstrated level of Self-Reflection Mastery Level demonstrated in identical sections of the same assignment.

STEPS FOLLOWED:
1. *Selected at random 2 (i.e. submissions #1 & #10) Summary/Final/Assignment 7 papers from a section of HE 242 taught in academic year 2012-2013*
2. *For each of the two (2) papers, locate and evaluate the Summary/Section Five of each paper for of the 5-Componants of Self-Reflection as identified on the **Self-Reflection Rubric – 5 Components.**
In most HE 242 courses, Section Five of the Summary Paper looks like the **section provided below in red.***
3. *For each Section Five, total points earned from the 5 individual self-reflection components were tallied. The highest score possible was 50 points, indicating a "Reflective Practitioner". The lowest score possible is 35, indicating an "Unacceptable" level of self-reflection.*
4. *Using the **Self-Reflection Assessment Tool** provided below for each assignment's Section Five, each faculty member identified the*
   a. *Course modality,*
   b. *The total points earned,*

> *c.   The associated level of Self-Reflection Mastery Level*

> **HE 242 Assignment 7, Summary/Section Five**:
> *In this final section, provide a brief summary of your (8pts):*
> *1. Current stress strategy strengths that you've identified during the course,*
> *2. Areas you would like to continue to improve upon in the near future, and*
> *3. Insights gained from this course.*

3. Provide information about the results (i.e., what did you learn about how well students are meeting the outcomes)?

    - If scored (e.g., if a rubric or other scaled tool is used), please report the data, and relate to any appropriate benchmarks.

    - Results should be broken down in a way that is meaningful and useful for making improvements to teaching/learning.   Please show those specific results.

    Results:
    Faulty Evaluators: PT: 3   FT: 3   Campus Locations: 3
    Modality: On-Campus Sections - 3 On-line Sections - 2
    Range: On-Campus - 41-50 = Aware to Reflective Practitioner   On-Line – 36-48 = Reflective Novice to Reflective Practitioner
    Average: On-Campus – 45 = Aware Practitioner   On-Line – 40.75 = Reflective Novice

    Based on the evaluation of this sample set, our results indicate is that there was an overall higher level of Self- Reflection Mastery in the on-campus sections of this course while there is greater range in Self-Reflection skills in the on-line student population.

4. Identify any changes that should, as a result of this assessment, be implemented to help improve students' attainment of outcomes. (These may include, but are not limited to, changes in curriculum, content, materials, instruction, pedagogy etc).

    Based on this data, it may be prudent to incorporate into the online sections of this course an additional Self-Reflection skill development tool at the onset of the course.

5. Reflect on the effectiveness of this assessment tool and assessment process. Please describe any changes to assessment methodology that would lead to more meaningful results if this assessment were to be repeated (or adapted to another outcome). Is there a different kind of assessment tool or process that the SAC would like to use for this outcome in the future?   If the assessment tool and processes does not need to be revised, please indicate this.

    Based on faculty feedback, this Self-Reflection assessment tool and the methodology used was helpful is correctly identifying student self-reflection mastery.   It also provided feedback indicating that this section of the assignment is on track as far as assessing Student Reflection is concerned.

Appendix A: Critical Thinking and Problem Solving Core Outcome Rubric

Points	**4**	**3**	**2**	**1**
Explanation of issue (CT)	Issue/Topic is stated clearly and described comprehensively, delivering all relevant information	Issue/Topic is stated clearly and described so that understanding is not seriously impeded by omissions	Issue/Topic is stated but description leaves some terms undefined, ambiguities unexplored	Issue/Topic stated without clarification or description
Evidence (CT)	Information is taken from source(s) with enough interpretation / evaluation to develop a comprehensive analysis or synthesis.	Information is taken from source(s) with enough interpretation / evaluation to develop a coherent analysis or synthesis.	Information is taken from source(s) with some interpretation / evaluation, but not enough to develop a coherent analysis or synthesis.	Information is taken from source(s) without any interpretation / evaluation.
Identifies connections and relationships (CT)	Identifies and discusses conclusions, implication and consequences of issues considering context, data and evidence.	Identifies only the essential connections and relationships.	Basic identification of connections and relationships.	Limited identification of connections and relationships.
Proposed Hypothesis (PS)	Proposes one or more solutions / hypotheses that indicate a deep comprehension of the problem. Sensitive to contextual factors as well as all of the following: ethical, logical, and cultural dimensions.	Proposes one or more solutions / hypotheses that indicates comprehension of the problem. Sensitive to contextual factors as well as one of the following: ethical, logical, or cultural dimensions.	Proposes one solution/hypothesis that is "off the shelf" rather than individually designed to address the specific contextual factors of the problem.	Proposes a solution/hypothesis that is difficult to evaluate because it is vague or only indirectly addresses the problem statement.
Identify Strategies to evaluate (PS)	Identifies multiple approaches for solving the problem that apply within a specific context.	Identifies multiple approaches for solving the problem, only some of which apply within a specific context.	Identifies only a single approach for solving the problem that does apply within a specific context.	Identifies one or more approaches for solving the problem that do not apply within a specific context.

*Adapted from the AAC&U Problem Solving and Critical Thinking Value Rubrics

		Appendix B: SELF-REFLECTION RUBRIC - 5 COMPONENTS
POINTS	1. Clarity	
10	The language is clear and expressive. The reader can create a mental picture of the situation being described. Abstract concepts are explained accurately. Explanation of concepts makes sense to an uninformed reader	
9	Minor, infrequent lapses in clarity and accuracy.	
8	There are frequent lapses in clarity and accuracy.	
7	Language is unclear and confusing throughout. Concepts are either not discussed or are presented inaccurately	
POINTS	2. Relevance	
10	The learning experience being reflected upon is relevant and meaningful to student and course learning goals.	
9	The learning experience being reflected upon is relevant and meaningful to student and course learning goals.	
8	Student makes attempts to demonstrate relevance, but the relevance is unclear to the reader.	
7	Most of the reflection is irrelevant to student and/or course learning goals.	
POINTS	3. Analysis	
10	The reflection moves beyond simple description of the experience to an analysis of how the experience contributed to student understanding of self, others, and/or course concepts.	
9	The reflection demonstrates student attempts to analyze the experience but analysis lacks depth.	
8	Student makes attempts at applying the learning experience to understanding of self, others, and/or course concepts but fails to demonstrate depth of analysis.	
7	Reflection does not move beyond description of the learning experience(s).	
POINTS	4. Interconnections	
10	The reflection demonstrates connections between the experience and material from other courses; past experience; and/or personal goals.	
9	The reflection demonstrates connections between the experience and material from other courses; past experience; and/or personal goals	
8	There is little to no attempt to demonstrate connections between the learning experience and previous other personal and/or learning experiences.	
7	No attempt to demonstrate connections to previous learning or experience.	
POINTS	5. Self-Criticism	
10	The reflection demonstrates ability of the student to question their own biases, stereotypes, preconceptions, and/or assumptions and define new modes of thinking as a result.	
9	The reflection demonstrates ability of the student to question their own biases, stereotypes, preconceptions.	
8	There is some attempt at self-criticism, but the self-reflection fails to demonstrate a new awareness of personal biases, etc.	
7	Not attempt at self-criticism.	

Self-Reflection Assessment Tool

Highlight The Course Modality	Indicate Total Points Earned _____pts	Self-Reflection Mastery Levels Check the Self-Reflection Mastery Level	✓
On-Line	46-50 pts	Reflective Practitioner	
On-Campus	41-45 pts	Aware Practitioner	
Hybrid	36-40 pts	Reflection Novice	
	30-35 pts	Unacceptable	