

# Annual Report for Assessment of Outcomes 2011-2012

Please address the questions below  
send to [learningassessment@pcc.edu](mailto:learningassessment@pcc.edu) by **June 22, 2012**; with Annual Report in the subject line

*Note: Information provided in this report may be inserted into or summarized in Section 2C (LDC/DE) or 6B (CTE) of the Program Review Outline.*

## Program: Dental Hygiene

**Introductory Note to Learning Assessment Council:** The PCC Dental Hygiene Program is a robust two year program with complex assessment processes occurring throughout the student's training. Graduates must be competent oral health care providers when working with individual patients of all ages and also with diverse groups within the community. In addition, each graduate must be committed to maintaining and enhancing their level of knowledge and skill through continuing education, while also promoting growth within their profession.

While completing this report the DH SAC came to realize that utilizing student assessment results for improvement of curriculum development in the future should be done systematically and in depth. For these reasons, the SAC has decided to report on five of the program outcomes each biennium and the other four outcomes in the interim biennium. Furthermore, while multiple assessment methods are used in demonstrating competency for each outcome, the SAC will choose one assessment tool to present each year to the Learning Assessment Council with detailed data. This approach will benefit the SAC members by focusing on one area at a time in depth and creating improvement of curriculum delivery in a systematic way.

1. Describe **changes that have been implemented** towards improving students' attainment of outcomes that resulted from outcome **assessments carried out in 2010-2011**. These may include but are not limited to changes to content, materials, instruction, pedagogy etc.

*Several areas of improvement were identified while assessing the attainment of program outcomes of the 2010-11 graduates. The changes include:*

1. *Preparing students for the new "Process of Care" exam requires additional curriculum development in theory courses in order to provide a greater focus on problem solving with cases. This content and case practice will be put into the Winter DH 201 theory course.*
2. *Increase the credit hours for Histology and Embryology (DH 128). Student learning was hindered because presenting lecture material in a one hour lecture per week did not allow adequate time for student assessment in an ongoing way throughout the term. Student deficiencies were not revealed until midterm and final exams were completed. More time is necessary for students to apply the information.*
3. *Increased coaching of students will take place on patients with heavy deposit earlier in the student's second year of training in order to prepare students for Mock Board Exam testing.*

**For each outcome assessed this year: Each of the five outcomes addressed this year will have its own report for these four questions (based on the one assessment tool chosen by the faculty to represent outcome attainment).**

**OUTCOME #1 Communication:** Communicate effectively with patients, peers, the public and other healthcare professionals using verbal, non-verbal and written language with clarity, coherence and purpose.

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).

This assignment involved 4 students working together to research a condition in the dental office that the dental hygienist needs to be aware of, putting that information into a PowerPoint presentation and each member giving an oral presentation of that topic to their classmates. The students are assessed on the thoroughness of their research, the clarity of the presentation, their work as a group and their individual presentation to the class.

- 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?

All the 1st year dental hygiene students were assessed. Communication skills are extremely important for the dental professional. These project topics, at this early stage in their dental hygiene education, were chosen to help facilitate students' development in communication skills before seeing patients. By practicing first with each other, giving instruction and disseminating information to fellow classmates, students will further develop their professional voice for communicating with patients, peers, doctors and other professionals in patient care.

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

(Included. Please see the next page.)

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

Only one evaluator was used: the instructor for the class.

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.

The scored rubric results are attached. In summary, of the five groups (of four students each), the following generalities were observed:

- All groups performed generally very well as beginning presenters
  - One group was not as thorough in their information research or time adherence.
  - One student's nervousness affected her ability to present information and speak smoothly.
- Results should be broken down in a way that is meaningful and useful for making improvements to teaching/learning. Please show those specific results.

Using the rubric as a guide, nearly all students have been able to meet a minimum benchmark of at least 93%, when the rubric expectation was at least 80% for each individual. I have found that the clearer the instructions are for students, along with descriptors of my expectations, the better they

perform. The one student exception had to do with severe anxiety over standing in front of the class and speaking. Even with allowance for this, the student still exceeded the benchmark.

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).

Future Improvement for learning will include suggestions that students practice their presentations to each other prior to their actual presentation date. No other changes are needed at this time.

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.

The rubric is clear, the assignment instructions are explicit, and the expectation is that these first-year students will perform at a "Well-Developed" level of the rubric for their first of many oral presentations. This allows the "Exceptional" rating to be available for students to excel in areas and be noted. This also allows that students, who perform poorly in one area of the rubric, may see visible evidence of better performance in other areas. At this time, there is no other assessment tool or process that the SAC would like to use for this outcome and we feel that this assessment tool and process is appropriate to keep as is.

### Dental Hygiene Program 2012 Learning Assessment Council Report

**Outcome #1 Communication: Communicate effectively with patients, peers, the public and other healthcare professionals using verbal, non-verbal and written language with clarity, coherence and purpose.**

#### Assessment Tool: DH 101 Jigsaw

| Student                        | 1    | 2   | 3    | 4    | 5    | 6   | 7    | 8   | 9   | 10   | 11   | 12   | 13  | 14   | 15   | 16   | 17   | 18   | 19   |
|--------------------------------|------|-----|------|------|------|-----|------|-----|-----|------|------|------|-----|------|------|------|------|------|------|
| <b>Individual Contribution</b> |      |     |      |      |      |     |      |     |     |      |      |      |     |      |      |      |      |      |      |
| Faces Audience                 | 5    | 3   | 3    | 3    | 5    | 3   | 4    | 4   | 4   | 5    | 4    | 5    | 3   | 4    | 5    | 4    | 4    | 5    | 5    |
| Voice Clear, audible           | 4    | 3   | 4    | 4    | 4    | 4   | 4    | 3   | 4   | 5    | 5    | 5    | 4   | 4    | 5    | 4    | 3    | 5    | 5    |
| Content Knowledge              | 5    | 3   | 3    | 3    | 5    | 3   | 3    | 2   | 4   | 5    | 4    | 5    | 3   | 4    | 5    | 4    | 4    | 4    | 5    |
| <b>Group Presentation</b>      |      |     |      |      |      |     |      |     |     |      |      |      |     |      |      |      |      |      |      |
| Adheres to Time Frame          | 5    | 5   | 5    | 5    | 4    | 4   | 4    | 4   | 3   | 3    | 3    | 3    | 4   | 4    | 4    | 5    | 5    | 5    | 5    |
| Visuals, handout, demo         | 5    | 5   | 5    | 5    | 4    | 4   | 4    | 4   | 5   | 5    | 5    | 5    | 4   | 4    | 4    | 4    | 4    | 4    | 4    |
| Thoroughness of info           | 4    | 4   | 4    | 4    | 5    | 5   | 5    | 5   | 3   | 3    | 3    | 3    | 5   | 5    | 5    | 4    | 4    | 4    | 4    |
| Manner Positive/Interest       | 4    | 4   | 4    | 4    | 4    | 4   | 4    | 4   | 4   | 4    | 4    | 4    | 4   | 4    | 4    | 4    | 4    | 4    | 4    |
| <b>TOTAL POINTS</b>            | 32   | 27  | 28   | 28   | 31   | 27  | 28   | 26  | 27  | 30   | 28   | 30   | 27  | 29   | 32   | 29   | 28   | 31   | 32   |
| <b>% RECEIVED</b>              | 114% | 96% | 100% | 100% | 111% | 96% | 100% | 93% | 96% | 107% | 100% | 107% | 96% | 104% | 114% | 104% | 100% | 111% | 114% |

**SCORING DESCRIPTOR KEY**

- 5 Exceptional:** Memorable; distinctive; sophisticated application of knowledge and skills
- 4 Well-Developed:** Shows thorough and effective application of knowledge and skills
- 3 Adequate:** Acceptable work that demonstrates application of essential knowledge and skills
- 2 Partial:** Basic but inconsistent application of essential knowledge and skills; work has errors or omissions that detract from the overall quality; work needs further development
- 0 Absent:** Work shows little or no application of essential knowledge and skills; work contains major errors or omissions

**OUTCOME #2** Apply scientific research methods to support evidence based treatment modalities with specific concern for oral health and overall health.

### DH 106 TABLE CLINIC

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).

This is a visual display and oral presentation of a researched medical condition that will affect how the dental hygienist delivers care to the patient with this condition. This project compliments another assignment, a research paper written for the same class. The students are assessed on the content of their display (researched material), the visual appearance of the display, the student's oral delivery of their presentation and the student's own professional appearance. It is a direct assessment. Students are evaluated initially during a "dress rehearsal" for each other in class (the results of the attached assessment) in preparation for a "final performance" in front of the PCC DH Advisory Board members, during an official Advisory Board meeting. This initial assessment, with very specific feedback given, prepares them to perform at a level of professional confidence that belies the student's inexperience in this type of endeavor. Universally, students incorporate the suggested recommendations into their final presentation before the Board members, and students receive a final grade on the project that reflects this. If changes are not incorporated into the final presentation, students receive their initial assessment grade for this project.

- 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?

All the 1st year dental hygiene students were assessed. Communication skills are extremely important for the dental professional and this is a continuation of building communication skills, as well as learning how scientific research supports and guides clinical treatment decisions.

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

(Included. Please see the next page.)

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

Only one evaluator was used: the instructor for the class. All evaluations were done on the same day.

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.

The scored rubric results are attached. In summary, the majority of the students have performed at the expected "Well-Developed" level in all areas except for a few. Some students scored higher than expected in some areas of their presentation and some students performed lower. When using these scores to compare to the students' performance at the beginning of the year in oral presentations, the students overall performance during this third term was far better, showing an improvement overall in comfort with public speaking. The students appeared to be more prepared and significantly more comfortable with this oral presentation than the first, showing evidence of professional growth in this area.

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

Using the rubric, all students were able to perform above the minimum expectation for this assignment. At this point, the SAC feels that there are no improvements needed at this time.

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).

The assessment outcomes support that I not change anything with this assignment assessments at this time. Additionally, post-presentation student surveys indicate that the methodology of this assessment is greatly appreciated by students as helping them overcome speaking/presenting fears and grow in their chosen profession.

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.

The rubric is clear, the assignment instructions are explicit, and the expectation is that students will perform at a "Well-Developed" level of the rubric. Currently, the students are evaluated twice: first assessment is done at a "dress rehearsal" to classmates with specific feedback for improvement. The second assessment is made (by the same instructor) at the PCC DH Advisory Board meeting. This method of assessment has proven to be very effective in helping students improve and perform at a level that exceeds the expectation for students at this point in their dental hygiene education. Students know that they will want to perform at the highest professional level and earn the best grade possible, as well as make a very good impression appearing before our Advisory Board members. They eagerly accept any suggestions for improvement from their initial presentations to their classmates and incorporate them immediately for the next day's Board presentation. At this time, there is no other assessment tool or process that the SAC would like to use for this outcome and we feel that this assessment tool and process is appropriate to keep as is.

### Dental Hygiene Program 2012 Learning Assessment Council Report

**Outcome #2 SCIENCE BASED: Apply scientific research methods to support evidence based treatment modalities with specific concern for oral health and overall health.**

**Assessment Tool: DH 103 Special Needs/Modified Care Patient Table Clinic**

| Student                       | 1    | 2    | 3   | 4    | 5    | 6   | 7    | 8   | 9   | 10  | 11   | 12   | 13   | 14 | 15   | 16   | 17  | 18  | 19   | 20 |
|-------------------------------|------|------|-----|------|------|-----|------|-----|-----|-----|------|------|------|----|------|------|-----|-----|------|----|
| <b>Content</b>                |      |      |     |      |      |     |      |     |     |     |      |      |      |    |      |      |     |     |      |    |
| Descrp. of Condition          | 4    | 4    | 4   | 4    | 4    | 4   | 4    | 4   | 4   | 4   | 4    | 4    | 4    |    | 4    | 4    | 4   | 4   | 4    | 4  |
| Adaptation of DH Care         | 4    | 4    | 4   | 4    | 4    | 4   | 4    | 4   | 4   | 4   | 4    | 4    | 4    |    | 4    | 4    | 4   | 4   | 4    | 5  |
| Quality/Depth Research        | 4    | 4    | 4   | 4    | 4    | 4   | 4    | 4   | 4   | 4   | 4    | 4    | 4    |    | 4    | 4    | 4   | 4   | 4    | 4  |
| Accuracy/Reliable             | 4    | 4    | 4   | 4    | 4    | 4   | 4    | 4   | 4   | 4   | 4    | 4    | 4    |    | 4    | 4    | 4   | 4   | 4    | 4  |
| Handout                       | 4    | 4    | 4   | 4    | 4    | 4   | 4    | 4   | 4   | 4   | 4    | 4    | 4    |    | 4    | 4    | 4   | 4   | 4    | 4  |
| <b>Visual Display Appear.</b> |      |      |     |      |      |     |      |     |     |     |      |      |      |    |      |      |     |     |      |    |
| Eye appeal/color              | 4    | 4    | 4   | 4    | 4    | 4   | 5    | 4   | 4   | 4   | 4    | 3    | 4    |    | 4    | 4    | 5   | 4   | 3    |    |
| Lettering/readability         | 4    | 4    | 4   | 4    | 4    | 4   | 5    | 4   | 3   | 3   | 4    | 3    | 4    |    | 4    | 4    | 5   | 4   | 3    |    |
| Creativity/Construction       | 5    | 4    | 5   | 5    | 5    | 4   | 5    | 4   | 3   | 3   | 4    | 3    | 4    |    | 5    | 4    | 4   | 4   | 5    |    |
| <b>Oral Delivery</b>          |      |      |     |      |      |     |      |     |     |     |      |      |      |    |      |      |     |     |      |    |
| Voice hear/clear              | 5    | 4    | 4   | 4    | 4    | 4   | 3    | 2   | 4   | 4   | 4    | 4    | 4    |    | 4    | 4    | 4   | 4   | 4    | 4  |
| Clarity of ideas              | 4    | 4    | 4   | 4    | 4    | 4   | 4    | 3   | 4   | 4   | 4    | 4    | 4    |    | 4    | 4    | 4   | 4   | 4    | 4  |
| Knowledge of subject          | 5    | 4    | 4   | 4    | 4    | 3   | 4    | 3   | 4   | 4   | 5    | 5    | 4    |    | 5    | 4    | 4   | 4   | 4    | 4  |
| Eye contact w. audience       | 4    | 4    | 4   | 4    | 4    | 4   | 4    | 2   | 4   | 4   | 4    | 5    | 4    |    | 4    | 4    | 4   | 4   | 4    | 4  |
| Enthusiasm for subject        | 4    | 4    | 4   | 4    | 4    | 4   | 4    | 3   | 4   | 4   | 5    | 5    | 4    |    | 4    | 4    | 4   | 4   | 4    | 4  |
| Time for questions            | 4    | 4    | 4   | 4    | 4    | 4   | 4    | 4   | 4   | 4   | 4    | 4    | 4    |    | 4    | 4    | 4   | 4   | 4    | 4  |
| <b>Personal Appearance</b>    |      |      |     |      |      |     |      |     |     |     |      |      |      |    |      |      |     |     |      |    |
| Hair/Nails                    | 4    | 4    | 4   | 4    | 4    | 4   | 4    | 3   | 3   | 4   | 4    | 4    | 4    |    | 4    | 4    | 3   | 4   | 4    | 4  |
| Clothing/shoes                | 4    | 4    | 3   | 5    | 4    | 4   | 4    | 4   | 4   | 4   | 4    | 4    | 4    |    | 4    | 4    | 3   | 4   | 4    | 4  |
| Overall Prof. Appear.         | 3    | 4    | 3   | 5    | 4    | 4   | 3    | 2   | 3   | 4   | 4    | 4    | 4    |    | 4    | 4    | 3   | 3   | 4    | 4  |
| <b>TOTAL POINTS</b>           | 70   | 68   | 67  | 71   | 69   | 67  | 69   | 58  | 64  | 66  | 70   | 68   | 68   | 0  | 70   | 68   | 67  | 67  | 68   | 0  |
| <b>% RECEIVED</b>             | 103% | 100% | 99% | 104% | 101% | 99% | 101% | 85% | 94% | 97% | 103% | 100% | 100% | 0% | 103% | 100% | 99% | 99% | 100% | 0% |

**SCORING DESCRIPTOR KEY**

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- 0 Absent:** Work shows little or no application of essential knowledge and skills; work contains major errors or omissions

**Please Note:** Students #14 and 20 have dropped the program due to personal/economical reasons.

**OUTCOME #3** Identify problems, investigate and use appropriate methods of reasoning, and develop creative and practical solutions to personal, professional and community issues regarding the delivery of oral health care.

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).

This is a written report that reflects a year-long community outreach educational program. The project is developed, implemented and evaluated during a three-course series delivered over three consecutive teaching terms. Students work in groups of two or more beginning fall term (DH 208) to identify a target population whom they are interested in working with. Students perform a needs assessment and develop an educational program around the assessment data. During winter term (DH 252), the students implement the program and evaluate its effectiveness. At the end of the spring term (DH 253), students summarize their project in a written report. In addition, content from a fourth course, Research Issues in Oral Health (DH 250) is used for the scientific aspect of report writing. This is a direct assessment that measures the students' ability to follow a program planning model when educating individual patients or groups.

- 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?

All 2nd year students were assessed as they worked in pairs or groups; this includes 19 traditional dental hygiene students and 8 from the Kaiser cohort.

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

A grading rubric was given to the students before they began their written report as a guide for report writing and so they knew the assignment expectations. Please refer to the grading rubric on the following page.

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

One instructor evaluated all final reports using the grading rubric.

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.

The scored rubric results are attached. In summary, of the eight reports, the following generalities were observed:

- All groups presented thorough reports
- Two groups demonstrated underdeveloped introductions/literature search
- Four of the eight groups did not visually discuss the data of their needs assessment/evaluation using a graph
- Five groups did not employ learning objectives that were measurable

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

The results are broken down in the rubric results attached. The final grades for the reports ranged from 86% to 96%.

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).

Because all groups did not perform the same in the sections of introduction, graphing data and developing measurable learning objectives, the report writing/grading rubric can be enhanced to include more specific directions for the students. For example, in the rubric where it indicates "list specific learning objectives," this section could be reworded to say "list specific measurable learning objectives." Also, because the topic and lecture given on developing measurable learning objectives was delivered during winter term and the report was written during spring term, there is a time lag. Another improvement to the rubric that addresses the time lag could include listing the name of the course and lecture that covered learning objectives i.e., "list specific measurable learning objectives" (Please refer to the DH 252 Lecture titled "Teaching Methodologies.") This strategy can also be useful for the students to include graphs of their data i.e., "Include graphs of assessment and evaluation data (Please refer to the DH 250 Research Lecture titled "Biostatistics.") To improve the introductions, the rubric can be more specific with stating a particular length the introduction should be (i.e., minimum three paragraphs.)

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.

The expectation is that soon to graduate students will perform at a "Well-Developed" level of the rubric for the written report of their year-long community outreach project. This allows the "Exceptional" rating to be available for students to excel in areas and be noted. This also allows that students, who perform poorly in one area of the rubric, may see visible evidence of better performance in other areas. At this time, there is no other assessment tool or process that the SAC would like to use for this outcome and we feel that this assessment tool and process is appropriate to keep after improvements/revisions to the rubric will be made.

### Dental Hygiene Program 2012 Learning Assessment Council Report

**Outcome #3 Critical Thinking: Identify problems, investigate and use appropriate methods of reasoning, and develop creative and practical solutions to personal, professional and community issues regarding the delivery of oral health care.**

**Assessment Tool: DH 253 Community Oral Health Student Outreach Project**

| Student                       | Group 1 | Group 1 | Group 1 | Group 2 | Group 2 | Group 2 | Group 3 | Group 3 | Group 3 | Group 4 | Group 4 | Group 4 | Group 5 | Group 5 | Group 5 | Group 5 | Group 6 | Group 6 | Group 6 | 20 |
|-------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----|
| <b>Report Framework</b>       |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |    |
| Introduction/Review Lit       | 5       | 5       | 5       | 5       | 5       | 5       | 3       | 3       | 3       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5  |
| Profile of Target Pop.        | 5       | 5       | 5       | 5       | 5       | 5       | 4       | 4       | 4       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5  |
| Needs Assessment              | 5       | 5       | 5       | 4       | 4       | 4       | 5       | 5       | 5       | 4       | 4       | 4       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5  |
| DH Diagnosis Data Analysis    | 2       | 2       | 2       | 1       | 1       | 1       | 3       | 3       | 3       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 3       | 3       | 3       | 3  |
| Progr. Plan/Lesson Plans      | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5  |
| <b>Implementation</b>         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |    |
| Summarize impl. Process       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5  |
| Time constraints etc.         | 4       | 4       | 4       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 3       | 3       | 3       | 3       | 5       | 5       | 5       | 5  |
| Discussed procedures          | 4       | 4       | 4       | 5       | 5       | 5       | 4       | 4       | 4       | 5       | 5       | 5       | 4       | 4       | 4       | 4       | 5       | 5       | 5       | 5  |
| Visual Aids used              | 5       | 5       | 5       | 5       | 5       | 5       | 4       | 4       | 4       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5  |
| Teaching methods              | 4       | 4       | 4       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5  |
| <b>Evaluation</b>             |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |    |
| summarize met goals/obj       | 4       | 4       | 4       | 5       | 5       | 5       | 4       | 4       | 4       | 5       | 5       | 5       | 4       | 4       | 4       | 4       | 5       | 5       | 5       | 5  |
| successes noted               | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 4       | 4       | 4       | 4       | 5       | 5       | 5       | 5  |
| areas of improve. Noted       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 3       | 3       | 3       | 3       | 5       | 5       | 5       | 5  |
| <b>Bibliography</b>           |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |    |
| Bibliography                  | 5       | 5       | 5       | 4       | 4       | 4       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5  |
| <b>Presentation of Report</b> |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |    |
| Presentation of Report        | 2       | 2       | 2       | 4       | 4       | 4       | 1       | 1       | 1       | 2       | 2       | 2       | 5       | 5       | 5       | 5       | 4       | 4       | 4       | 4  |
| <b>Punctuation/Grammar/SP</b> |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |    |
| Punctuation/Grammar/SP        | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5  |
| <b>Framework Followed</b>     |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |    |
| Framework Followed            | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5  |
| <b>Submitted on Time</b>      |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |    |
| Submitted on Time             | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5  |
| <b>TOTAL POINTS</b>           | 80      | 80      | 80      | 83      | 83      | 83      | 78      | 78      | 78      | 86      | 86      | 86      | 83      | 83      | 83      | 83      | 87      | 87      | 87      | 0  |
| <b>% RECEIVED</b>             | 89%     | 89%     | 89%     | 92%     | 92%     | 92%     | 87%     | 87%     | 87%     | 96%     | 96%     | 96%     | 92%     | 92%     | 92%     | 92%     | 97%     | 97%     | 97%     | 0% |

**SCORING DESCRIPTOR KEY**

|  |                                                                                                                                                                                                   |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>5</b> <b>Exceptional:</b> Memorable; distinctive; sophisticated application of knowledge and skills                                                                                            |
|  | <b>4</b> <b>Well-Developed:</b> Shows thorough and effective application of knowledge and skills                                                                                                  |
|  | <b>3</b> <b>Adequate:</b> Acceptable work that demonstrates application of essential knowledge and skills                                                                                         |
|  | <b>2</b> <b>Partial:</b> Basic but inconsistent application of essential knowledge and skills; work has errors or omissions that detract from the overall quality; work needs further development |
|  | <b>1</b> <b>Absent:</b> Work shows little or no application of essential knowledge and skills; work contains major errors or omissions                                                            |

**OUTCOME #4** Understand and identify personal and public overgeneralizations and stereotyping and how these attitudes affect oral health beliefs and issues that arise from differences, while providing appropriate and effective care to diverse client populations in an increasing global marketplace.

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).

This assignment involves working in a dental hygiene clinical rotation with a partner at the OHSU Russell Street Dental Clinic. The focus of the experience is not technical; rather it is an enrichment experience for students to work with a diverse population. The Russell Street project matches dental hygiene students with patients who have HIV/AIDS and strives to assist students in caring about the patient as a whole vs. dental conditions only. Following the student's rotation, they complete and submit a personal reflection using a Likert survey plus open-ended question. In addition, the site liaison evaluates the student performance. This is an indirect assessment that attempts to measure the students' attitudes towards working with HIV/AIDS patients.

- 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?

All 2nd year students were assessed including 19 traditional dental hygiene students and 8 Kaiser Cohort students. In order to get the most accurate feedback on the rotation survey, we wanted to measure 100% of the survey results.

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

Please refer to the survey on the following page.

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

A Likert scale was used to construct the survey questions to enable inter-rater 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.

The scores are attached on the following page.

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

In summary, of the 27 students measured the following generalities were observed:

- The majority of students felt prepared for their rotation experience
- The Russell Street clinical rotation experience should remain as a clinical rotation site for future students
- All students scored high when evaluated by the site liaison

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).

Since most students felt prepared for their rotation, we will continue to have the Russell Street dentist and HIV patient panel present to the students before they go on rotation. This past year one group went before the presentation because of logistics. We will try our best to avoid this in the future.

All students received excellent evaluation scores from the site liaison who works with each pair of students and guides them with each patient. This indicates the students were prepared to work with a diverse population and represented the college in a positive manner.

This was the first year that the rotation reflection tool incorporated a Likert survey to measure feedback; in the past this reflection assignment was strictly an open-ended questionnaire. After analyzing the results, maybe some of the questions ask the students to evaluate something we don't really need to measure. For example, how useful is it to measure if the staff at the site valued my efforts? This is an item that measures attitudes and is out of our control, and something we could not improve or change. The majority of the staff members at the rotation site, on any given day are OHSU dental students working on a clinical rotation assignment. However, it is important to know if our students are treated appropriately by staff, so perhaps the survey question can be reworded to ask for different information.

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.

At this time, this survey assessment tool plus open-ended questions is an appropriate way to measure this outcome.

**Dental Hygiene Program 2012 Learning Assessment Council Report**

**Outcome #4 Cultural Awareness: Understand and identify personal and public overgeneralizations and stereotyping and how these attitudes affect oral health beliefs and issues that arise from differences, while providing appropriate and effective care to diverse client populations in an increasing global marketplace.**

**Assessment Tool: DH 253 Russell Street HIV Clinic Rotation**

| Student                          | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   |
|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <b>Site Supervisor Evaluator</b> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Attendance                       | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    |
| Professionalism                  | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    |
| Communication                    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    |
| Adaptability                     | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    |
| Teamwork                         | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    |
| Work Practices                   | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    |
| <b>TOTAL POINTS</b>              | 18   | 18   | 18   | 18   | 18   | 18   | 18   | 18   | 18   | 18   | 18   | 18   | 18   | 18   | 18   | 18   | 18   | 18   | 18   | 18   |
| <b>% RECEIVED</b>                | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| <b>Student Self Reflection</b>   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Felt Prepared for Rotat.         | 4    | 3    | 4    | 5    | 4    | 3    | 5    | 4    | 4    | 5    | 2    | 5    | 4    | 5    | 4    | 4    | 4    | 4    | 5    | 4    |
| Staff valued my efforts          | 4    | 4    | 5    | 5    | 4    | 4    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 4    | 5    | 5    | 4    | 5    | 5    | 5    |
| I Impacted pts. health           | 4    | 4    | 3    | 5    | 4    | 4    | 5    | 3    | 4    | 5    | 5    | 5    | 4    | 5    | 4    | 5    | 4    | 5    | 4    | 4    |
| comfortable tx/commun            | 5    | 4    | 4    | 5    | 4    | 4    | 5    | 4    | 5    | 5    | 5    | 5    | 5    | 4    | 5    | 5    | 5    | 5    | 5    | 3    |
| PCC skills prepared me           | 5    | 5    | 4    | 5    | 4    | 4    | 5    | 4    | 5    | 5    | 5    | 5    | 5    | 4    | 4    | 5    | 5    | 5    | 5    | 4    |
| experience benef. To me          | 4    | 5    | 4    | 4    | 4    | 4    | 5    | 4    | 4    | 5    | 5    | 5    | 4    | 3    | 5    | 5    | 5    | 5    | 5    | 3    |
| include site for future          | 5    | 5    | 4    | 5    | 4    | 3    | 5    | 4    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 2    |
| <b>TOTAL POINTS</b>              | 31   | 30   | 28   | 34   | 28   | 26   | 35   | 28   | 32   | 35   | 32   | 35   | 32   | 30   | 32   | 34   | 32   | 35   | 25   | 0    |
| <b>% RECEIVED</b>                | 89%  | 86%  | 80%  | 97%  | 80%  | 74%  | 100% | 80%  | 91%  | 100% | 91%  | 100% | 91%  | 86%  | 91%  | 97%  | 91%  | 100% | 71%  | 0%   |

**SCORING DESCRIPTOR KEY: Site Supervisor**

|   |                                                       |
|---|-------------------------------------------------------|
| 3 | Above Average; no deficiencies                        |
| 2 | Average; satisfactory (perhaps a minor deficiency)    |
| 1 | Below Average (disappointing because.....)            |
| 0 | Poor performance; needs specific improvement or re-do |

**SCORING DESCRIPTOR KEY: Student Rotation Reflection**

|   |                      |
|---|----------------------|
| 5 | Strongly Agree       |
| 4 | Agree                |
| 3 | Don't Know (Neutral) |
| 2 | Disagree             |
| 1 | Strongly Agree       |

**OUTCOME #5** Competently assess, plan, implement and evaluate individual and/or community needs related to oral disease prevention and therapy in an ever-changing healthcare environment.

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 mock WREB dental hygiene board exam is a clinical simulation that directly measures the student's clinical competence in preparation for their sixth and final board examination. This is probably the exam that is the most "at stake" for the students, as finding an appropriate live patient for the examination can be quite a challenging process. Therefore, this exam is the most difficult to repeat of the six exams.

- 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?

All 2nd year students were sampled in order to best evaluate this assessment tool in order to increase student pass rate. All 19 traditional dental hygiene students and 8 Kaiser Cohort students were measured.

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

Please refer to the rubric on the following page. Fortunately, WREB communicates with all educators to inform of any changes for exam for the upcoming year. This is helpful so we can construct a useful exam.

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

When evaluating student performance, three examiners are used to check each patient at completion. Two of the three examiners must agree on an error for it to count against the student. Before the exam, a training meeting is conducted and examiners calibrate/discuss what should be counted as acceptable or as an error. This improves intra-rater 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.

The scoring rubric results are attached. In summary, the following generalities were observed:

- 21 out of 27 students passed the mock board
- 6 students had to submit an alternate submission
- One student ran out of time and did not perform the periodontal probing section of the exam
- Of all the students who did not pass, the non-pass was due to calculus errors.

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

The results per student are measured in the rubric on the following page. Because the main reason that students did not pass was due to inefficient calculus removal, it is easier to identify students who need additional help. In addition, the instructor held ongoing discussions in the classroom about the exam processes and reviewed the strategies for first submission and alternate submission, and the point deductions involved in a first submission rejection. This clarified to all the students how important having an appropriate first submission is in their exam process.

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).

Changes to the assessment will most likely only occur if the WREB changes any testing or grading portion of the exam. However, the learning objectives that the students must successfully complete before they attempt the mock board can always be improved upon. For example, each year the non-passing students create an individualized plan for improvement regarding calculus removal; then a designated instructor sits with the student and patient one-on-one in order to correct and improve technical skills. Next year, it would be interesting to try and have the designated instructor sit with every student one-on-one before the exam. We could measure student success and see if the increased individualized teaching might show any relationship to increased mock board success rates.

In addition, WREB sends a detailed report of the exam components broken down per student per exam section. This information can be compared to the mock board results to identify relationships.

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

This assessment tool will remain for several reasons: 1) it simulates the real WREB exam and benefits all students, not just the non-passing students, 2) students complete a mock board evaluation survey and agree that it is an important activity for board preparation, and 3) when performed early it can help identify students needing additional help. At this time the mock board exam is the appropriate assessment tool and process that the SAC would like to use to measure this outcome.

