

Introduction:

The Portland Community College Dental Hygiene Program, which began in 1970, is proud to graduate highly competent dental hygienists each year. The program is accredited by the Commission on Dental Accreditation (CODA), *approval without reporting requirements*, and is scheduled to complete a self-study report and undergo its next accreditation site visit in 2010. The primary purpose of the self-study is to assess the effectiveness of the educational program in meeting 1) the program's stated goals and objectives and 2) the Commission's Accreditation Standards for Dental Hygiene Education Programs.

The Dental Hygiene program has chosen to undergo program review during Fall 2008. The knowledge gained from assessing the program during this review process will be instrumental in the development of the self-study documents for the future site visit. The hope is that through critical assessment of the program, we will be able to demonstrate what we are doing well, enhance areas where improvement is needed and determine emerging information and skills for future program development and inclusion.

During the program review process the PCC Document *Discipline/Program Review Outcomes* was utilized to evaluate the effectiveness of the program's curriculum and the competency of its graduates. It became evident during the review process that meeting the program requirements of the college and also the standards of CODA meant evaluating the Degree Outcomes required by the College, *and* the Program Goals and Skill Competencies required by CODA. To effectively demonstrate that the program is graduating competent dental hygienists, the following will be examined and discussed in this report:

Program Goals: The goals set by the faculty, director and staff to ensure students' educational needs are being met.

Student Basic Skill Competencies: As required by CODA, these competencies represent the skills that students will learn and demonstrate competency in during their two year educational program. The skills are evaluated at the beginning, developmental and competent levels throughout the program. Once achieved, they demonstrate that the program Degree Outcomes as required by the college, have been met.

DH Program Degree Outcomes: These outcomes describe what the graduate will be able to do with the degree they have earned, as a result of the program meeting the goals for which it was responsible for, and the student meeting the skill competencies required prior to graduation.

DH Program Review, Completed Fall 2008

Table of Contents:

| | |
|--|--|
| Program Review Outcome 1 | |
| A. Evaluation of the curriculum | 3 |
| B. Review/revise where necessary learning outcomes | 5 |
| C. Evidence the learning outcomes are being met by students | 8 |
| D. How courses address the college core outcomes | 8 |
| Program Review Outcome 2 | |
| A. Success of the program contributing to the College mission | 9 |
| B. Instructor Qualifications | 10 |
| C. Library and other outside classroom resources | 11 |
| Program Review Outcome 3 | |
| A. Professional development activities of faculty | 12 |
| B. Student demographics and impact on instruction | 16 |
| C. Use of feedback for making curricular or instructional change | 17 |
| D. Strategies used to increase enrollment, improve retention/student success | 19 |
| E. Increasing student access and diversity | 21 |
| F. Operational issues that impact student learning | 22 |
| Program Review Outcome 4 | |
| A. Program strengths and areas need for improvement | 26 |
| B. Recommendations for improvement | 28 |
| Program Review Outcome 5 | |
| A. Impact of the advisory committee | 30 |
| B. Job placement statistics | 31 |
| C. Learning outcomes and skills compared to business/industry needs | 32 |
| D. Future employment opportunities forecast | 32 |
| E. Barriers to students in completion of program | 33 |
| Summary | 34 |
| Exhibit 1-A | Assessment Plan for DH Program Goal Review |
| Exhibit 1-B1 | Alignment of PCC DH Degree Outcomes with PCC Core Outcomes |
| Exhibit 1-B2 | Course Alignment with program degrees and PCC Core Outcomes |
| Exhibit 1-B3 | Process Used to Review Course Syllabi |
| Exhibit 1-B4 | Process for Instructor to Evaluate their Course at the End of the Term |
| Exhibit 1-B5 | Yearly Process to Review Program Brochure, Catalog and Web-site |
| Exhibit 1-C1 | Basic Academic Skill Competencies and Table of Outcome Alignment |
| Exhibit 3-C2 | Advisory Committee members and professional supporters |
| Exhibit 3-F | Summary of Restorative Program Needs |

Program Review Outcome 1

To improve the quality of teaching and learning by asking faculty, staff and administrators to reflect upon and examine teaching methodologies, learning outcomes, and curriculum.

The faculty, staff and administration in the dental hygiene program continuously reflect upon and examine teaching methodologies, learning outcomes and curriculum in the following ways:

- Program focused in-service meetings Fall, Winter and Spring
- Bi-monthly SAC meetings
- Bi-monthly faculty meetings
- Curriculum review process
- Clinical faculty workshops designed to calibrate teaching methodology and assessment.
- Attendance at outcomes design sessions with Ruth Stiehl

A. Evaluate the curriculum using national and or professional discipline/program guidelines:

To meet CODA Accreditation Standards the DH program must “demonstrate its effectiveness using a formal and ongoing planning and assessment process that is systematically documented by:

- Developing a plan addressing teaching, patient care, research and service which are consistent with the goals of the sponsoring institution and appropriate to dental hygiene education;
- Implementing the plan;
- Assessing the outcomes, including measures of student achievement;
- Using the results for program improvement.”

(CODA Standard 1-1)

To support the published goals of PCC in the areas of Access, Student Success, Diversity, Continuous Improvement, Cultivating Partnerships and Community and to meet the above accreditation standard, the DH SAC developed the following program goals:

1. Access – We will provide access to quality dental hygiene education through the use of scientific evidence based instruction and technology that meets current industry standards.
2. Student Success – We will promote success for all dental hygiene students through outstanding teaching by faculty who act as mentors and professional role models and who provide instructional methodology that prepares the student to

successfully complete national, regional and /or state examination required for licensure and to enter the workforce.

3. Diversity – We will enrich the dental hygiene student’s educational experience by seeking to recruit culturally diverse faculty and staff who provide and promote cultural awareness that acknowledges each individual’s worth and uniqueness and enhances effective interactions, communications and/or provision of care with all individuals or groups.

4. Continuous Improvement – We will develop faculty and students who continuously seek to enhance knowledge as life-long learners by seeking peer support in professional associations, fulfilling evidence based continuing education and applying self-assessment and reflection skills.

5. Cultivating Partnerships – We will create partnerships that effectively link students with practicing oral and other health care professionals who will provide advising, mentoring and enrichment experiences in preparation for employment upon graduation.

6. Community – We will serve as a key resource to the community by preparing students to competently apply the dental hygiene process of care during treatment of patients at the onsite PCC clinic or while presenting oral health programs and care in community or more global enrichment experiences.

7. Ethics and Responsibility – We will prepare the student to practice ethically and responsibly as a licensed Registered Dental Hygienist who follows all State and federal regulations and the *ADHA Code of Ethics*.

The dental hygiene program utilizes the CODA suggested format in the analysis of the program’s success in reaching these goals. The following information for each goal is tracked:

- Objectives of each goal
- Monitoring Mechanism for each goal
- Evaluating Mechanism for each goal
- When each goal is evaluated
- Who collects the data
- Who assesses the data
- The results of the evaluation
- Action taken
- Program improvement as a result of data analysis

Please Refer to EXHIBIT 1-A Assessment Plan for DH Program Goal Review.

B. Review and revise where necessary learning outcomes for the discipline/program and/or for any sequence of courses within the discipline.

In Fall of 2007 the program assessed and revised the degree outcomes that are expected of the PCC Dental Hygiene Graduate. This process enabled the faculty and program director to align the program's outcomes with that of the college. The resulting outcomes reflect and align with the outcomes of the institution while also meeting the educational standards required by CODA.

Dental Hygiene AAS Degree Outcomes

1. Communicate effectively with patients, peers, the public and other healthcare professionals using verbal, non-verbal and written language with clarity, coherence and purpose.
2. Apply scientific research methods to support evidence based treatment modalities with specific concern for oral health and overall health.
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.
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.
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.
6. Enhance knowledge as a life-long learner in healthcare by seeking peer support in professional associations, fulfilling continuing education and exploring career and educational advancements.
7. Advocate for oral health and overall health for patients/communities by linking them with the appropriate resources and human services for individual needs and practice ethically within the scope of practice for dental hygienists as regulated by the State Dental Licensing Board.
8. Fulfill characteristics of a desired employee by demonstrating skills, teamwork, collaboration, respect, efficiency, and customer/patient service.
9. Examine and self assess one's own academic skill, professional competence and personal beliefs as they impact self and others to grow personally and professionally.

Please Refer to EXHIBITS:

- | | |
|---|----------|
| 1-B1 Alignment of PCC DH Degree Outcomes with PCC College Core | Outcomes |
| 1-B2 DH Program 1 st and 2 nd Yr. Course Alignment with Program and Outcome Goals | College |

During Winter and Spring 08, the faculty reviewed and revised the student skill competencies that were used during the 2003 Accreditation and Self-Study Report. The Report "*Competencies for Entry into the Profession of Dental Hygiene*" was utilized as a guideline to reduce the previous 57 student competencies down to 12 Basic Academic Competencies that measure the student's ability within five domains: Core Competencies, Health Promotion/Disease Prevention, Community, Patient/Client Care and Professional Growth and Development. (Journal of Dental Education, 2005 pgs 803-807)
Once achieved, these competencies demonstrate that the degree outcomes have been met.

PCC DH Student Basic Skill Competencies:

Following all state/federal laws and regulations the DH Student will:

1. model professional behaviors, ethics, cultural awareness and respect while assuming responsibility for patient/community care either practicing alone or as a member of a healthcare team.
2. promote oral and general health to individuals and groups.
3. communicate effectively, both verbally and in writing, with individuals/groups.
4. assess the oral health needs of an individual or community, determine the availability of resources/services and facilitate access to oral health services.
5. systematically collect, analyze and record diagnostic data during patient assessment through the use of measures that determine general, oral and psychosocial health status.
6. recognize health conditions and medications that impact overall patient care, oral health education and the patient's ability to maintain their oral health, and manage medical emergencies that occur in the clinical setting.
7. utilize critical decision making skills to establish a dental hygiene diagnosis that is based on assessment data.
8. collaborate with the patient and/or health professionals to formulate a dental hygiene care plan that is patient-centered, individualized and addresses risk factors.
9. utilize science/evidence based research and accepted standards of practice while performing clinical supportive treatment including educational, preventative and therapeutic services designed to achieve and maintain oral health.
10. evaluate the effectiveness of the implemented educational, preventative and therapeutic services and modify as needed.
11. provide accurate, consistent and complete documentation for the dental hygiene process of care, referrals and follow-up care.
12. practice self- assessment for life-long learning, professional growth and promotion of the profession.

To ensure that program goals and student competencies are being met (which in turn validates the graduate has met the degree outcomes), The Dental Hygiene Program SAC has developed a Curriculum Management Plan to continuously evaluate whether the program

courses are meeting CODA Standards; keeping up with industry standards and inclusion of current information; avoiding unnecessary duplication of material; utilization of instructors expertise and most importantly, meeting the students needs for reaching competency. The SAC Chair facilitates the management of the plan with support from the Program Director.

The Following Describes the Program's Annual Curriculum Management Plan:

| When | Activity | Who is Responsible |
|-------------|---|--|
| Fall Term | Evaluate Courses and Instruction from Spring Term Review Outcomes Assessment Results. Review National/Regional Board Exam Results. Review Advisory Committee Suggestions. Review College Wide Decisions Affecting Program Discuss Curriculum changes relating to annual assessment. Begin the process required to make minor/major course and program changes. Submit proposed changes to administration/EAC Review Library holdings and requests. Review Course Syllabi/Content for Winter Term Review Block Schedules/Rooms for Winter. Update faculty/student certifications/training/license | Students/faculty Faculty Faculty Clinic Coordinator |
| Winter Term | Evaluate Courses and Instruction from Fall Term Review Competencies/Outcomes Assess. Plan. Update/Distribute Assessments as Necessary. Identify Courses that address Degree Outcomes and Clinic Competencies. Review Methods of instruction for effectiveness. Review Sequencing of Courses. Review/Change as Needed for Brochure, Catalog, Web Site info. Review Course Syllabi/Content For Spring Term Review Block Schedules/Rooms for Spring | Students/faculty Faculty/Program Director Faculty |
| Spring Term | Evaluate Courses and Instruction for Winter Term Review Course Syllabi/Content for Fall Term Review Block Schedules/Rooms for Fall Term Assess Textbook and Instructional Needs Review Program Goals and methods for assessing. Review Equipment/Supply/Student Kit Status and Needs. Develop proposals for equipment acquisition/maintenance. Review Applicants for Fall Term Review Results of Chart Audit. Recommend changes in clinic procedures/policies. | Students/faculty Faculty |

Please Refer to:

- EXHIBITS: 1-B3 Process Used to Review Course Syllabi
 1-B4 Process for Instructor to Evaluate their Course at the End of the Term
 1-B5 Process to Review Program Brochure, Catalog and Web-site Yearly

Since the last program review the SAC has made several curriculum changes based on feedback and results from the curriculum review process. The decisions reflect emerging philosophy within the dental/health care field, as well as increase/decrease in credit hours to allow for more emphasis in areas that effect the current field of dental hygiene and reduction in areas where less emphasis of material is used. The changes made are described below: Head and Neck Anatomy moved to first term from fourth term to facilitate greater understanding of anatomy in the first year of training.

- Reduced Public Health course by one credit hour to remove repetition with Community courses. The course was renamed Research Issues in Dentistry to reflect the new emphasis of the course.
- Community Dentistry Courses renamed Community Oral Health to reflect the philosophy of overall oral health and wellness. One credit hour was added to allow for more involvement with community projects and to additional content in cultural competence.
- Oral Histology was reduced by one credit hour and the credit hour was added to Medical Emergencies to reflect the emerging increase in medically compromised, geriatric, special needs and patients with multiple medications who are seeking dental care in the dental office.
- Eliminated Radiograph interpretation course and incorporated the information within and throughout the two year curriculum for improved application of material by students during patient therapy.

C. Give Evidence that the discipline/program learning outcomes are being met by students.

Students meet program degree outcomes through demonstration of the DH Basic Academic Competencies during the two years of training.

Please Refer to EXHIBIT 1-C The Basic Academic Skills and Accompanying Table

D. Describe how the courses in this discipline/program address the College Core Outcomes.

The courses in the DH program are designed and sequenced to build on preceding knowledge from previous courses. Throughout the two year program courses address both the college core outcomes and program degree outcomes through the attainment of the DH Basic Academic Competencies. These competencies are introduced and met by students in specific courses either at the introductory, developmental or competent levels.

Please Refer to EXHIBIT 1-C The Basic Academic Skills and Accompanying Table

Program Review Outcome 2

To maintain instructional quality consistent with standards of excellence within the discipline/program.

A. *Assess the success of the discipline/program in contributing to the College mission.*

The dental hygiene program embraces the values of PCC. The program supports the goals of the college and has developed a mission that mirrors the College's and also reflects and promotes the goals of the profession.

Mission:
Portland Community College

Portland Community College provides access to an affordable, quality education in an atmosphere that encourages the full realization of each individual's potential. The college offers opportunities for academic, professional and personal growth to students of all ages, races, cultures, economic levels, and previous educational experiences.

Mission:
Portland Community College Dental Hygiene Program

The Portland Community College Dental Hygiene Program provides students with an educational opportunity that maximizes their strengths and encourages them to fully realize their individual potential as a respected and ethical representative of the profession; providing competent dental hygiene care to individuals and groups of all ages, races, cultures and economic levels.

The program demonstrates success in contributing to the mission of the college by:

Realization of student's individual potential:

- Students Pass National Dental Hygiene Board Exam (Knowledge and Cased Based Exam)
- Students Pass Western Regional Anesthesia and Clinical Board Exams (patient graded skill exams through regional testing agency)
- Graduates meet qualifications for State Licensure
- Graduates are employed in high demand field

Offers academic, professional and personal growth to students of all ages, races, cultures and economic levels.

- Academic – rigorous scientific and theory course work and skill attainment, Cultural Awareness training for faculty and students.
- Professional – Student American Dental Hygienist Association membership, Professional CE offerings, Attendance at Professional Association Meetings, Community Involvement, International Oral Health Opportunities, Student Community Care rotations to Veteran’s Hospital and Russell Street HIV Clinic.
- Personal – Self Reflection Course Journals, Portfolio Development, Self-Assessment during skill attainment.

Please Refer to EXHIBIT 2-1 PCC Institutional Effectiveness Demographics Report

B. Report any changes the SAC has made to instructor qualifications and the reasons for the change.

The dental hygiene program follows the CODA Accreditation Standard for faculty qualifications as follows:

CODA Standard 3-7

The dental hygiene program must be staffed by a core of well qualified full-time faculty who possess a baccalaureate or higher degree. Faculty providing didactic instruction must have earned at least a baccalaureate degree or be currently enrolled in a baccalaureate degree program. All dental hygiene program faculty members must have current knowledge of the specific subjects they are teaching. All program faculty must have documented background in educational methodology consistent with teaching assignments.

All Full Time Faculty Possess a Baccalaureate Degree or Higher, have documented backgrounds in educational methodology and current knowledge of the specific subjects they are teaching:

Nancy Pilgrim, DDS
 Cara Kao-Young, RDH, BS
 Sandra Curren, RDH, MS

All Part Time Faculty who teach didactic and clinical courses possess a Baccalaureate or Higher:

| | |
|------------------------|---------------------------|
| Krysten Clist, RDH, BS | Monica Lyster, RDH, BS |
| Al Hainisch, DMD | Monica Monsanto, RDH, BS |
| Anne Jackson, RDH, MS | Mickey Nearhood, RDH, MS |
| Nancy Kurtz, RDH, BS | Joclyn Thornburg, RDH, BS |
| April Love, RDH, DMD | |

In addition, the Program Director meets CODA Standard 3-3 by being a licensed RDH and possessing a Masters Degree: Josette Beach, RDH, MS

Instructor Qualifications for Faculty have not changed since the previous DH Program Review. The SAC did approve change to faculty teaching assignments with the hire of a new FT faculty member starting in 07/08 year. The decision was made at this time to create a lead first year and lead second year instructor, rather than instructors rotating between classes as was previously done. This change has created a more seamless year for students as they progress through each quarter.

C. Describe how the students in this discipline/program are using the library or other outside the classroom resources.

The following table describes how students utilize the library and outside classroom resources:

| Resource | Course | Method | Assignment |
|-----------------------------|--|---|--|
| PCC Library | DH 101 DH 250 | Library Intro/presentation. Presentation – How to do a peer-reviewed literature search. | Become familiar with PCC library resources. Use medical search engines to find research journal articles. |
| Internet/Personal Resources | DH 101, DH 101, 102, 103, 210, 260, 261, 201 DH Seminar | Web site research Topic Research Online Study | Professional Web-site Presentation to class Partner Jigsaw presentation, Table Clinic, Research Paper, CE (www.dentalcare.com) Internet based final exam with partners. National Board Review (www.andyrdh.com) |
| Professional Assoc. Mtgs. | DH 101, 103, 201, 202, 203 DH 261 | Meeting Attendance: ODHA, ODA, PCC Advisory Bd. Mtg. Perio Practice Observation/Interview | Network/build relationships with future colleagues, CE Oral Presentation to class. |
| CE courses/Guest Speakers | DH 101,102, 103, 201, 202, 203, 260, 261, | Meeting Attendance: Burkhart Dental, OBD, P&G, Hu-Friedy, Denstply, Pacific U., Dentist/RDH Presenters, Regence Blue Cross, Willamette Dental, Russell | Benefit from Role Modeling and mentoring. Gain New Information |

| | | | |
|-------------------------------------|--|--|--|
| | 210 | Street/HIV | |
| myPCC | DH 101, 102, 103, | Weekly/Bi-weekly presence | Access to course updates/ Instructor and student communication. Posting of Journals. |
| Online Course Utilizing Blackboard. | DH 230,208, 252, 253 | Hybrid Course Delivery | Discussion Boards, Quizzes/Exams Website research, assignments, journal reflections, self-assessments. |
| Community Service | DH 102 DH 205, 252, 253 DH 208, 252, 253 | Volunteer Participation Enrichment Experience Experience/provide DH Care Service Learning | WREB Anesthesia Partner for 2 nd yr. PCC Sealant Day PCC Sealant Day, Russell Street HIV VA Hospital, health fairs, school-based education. Individual Student Projects. |

Program Review Outcome 3

To respond to the changing needs of students and the community.

- A. *List the professional development activities of the faculty over the last three years and describe any instructional or curricular changes made as a result of those activities.***

PT faculty have had the opportunity to attend CE offerings presented by fellow faculty members, other dental professionals and product representatives. These professional development opportunities served as a means for their own increased knowledge of current information and the ability to calibrate and collaborate with co-faculty members and integrate the material into the student's curriculum. The following courses were made available to instructors over the last two years:

Ultrasonics, Intraoral Camera, Digital Radiography, Pharmacology for the geriatric and pediatric patient, Rx Writing for Dental Hygienists, Current Theory and practice of Periodontal Therapy, Overall Health through the Lifetime, Performing the

E/I Oral Exam, the Adult Learner, Creating a PCC Dental Hygiene Clinical teaching philosophy.

In addition, PT faculty members with assignment rights are encouraged to apply for staff development grants funded by the college.

FT Faculty have a set amount of program funds available yearly to pursue professional development. The dental hygiene faculty also write grants yearly for funding from Instructional Improvement, and Organizational and Staff Development. The following charts indicate professional development pursuits of the DH FT faculty in the last two years:

| Instructor | Professional Development | Changes to Curriculum |
|---------------|--|---|
| Sandra Curren | Member of ADHA (2000 to present) and Current President of Washington County ODHA Component (07/08) | Students now required to attend ODHA Annual Session and ODA Conference. |
| | Presenter of CE Courses to Washington County Component members, PCC Instructors and PCC Students (1/08-9/08) | Students attend CE courses as a student in preparation for professional involvement upon graduation. |
| | Attendance at Dental Educators' Radiology Workshop/Seminar (7/08) | DH 109 and 109L re-development. |
| | Advisory Board Member of Pacific University's Dental Health Professions Program (7/07 to present) | Allows for collaborative efforts between the two programs and with physical therapy program at Pacific. |
| | Director of Oregon DH Loan and Scholarship Committee, (2007 to present) | Increased information available and access to resources for PCC students. |
| | Re-development of courses taught (DH 101,102,103, 104,105,106,261) | Inclusion of current info and technology into courses as well as oral presentations added to 101, 102 and 103 with clear performance standards. |

| Instructor | Professional Development | Changes to Curriculum |
|----------------|--|---|
| Cara Kao-Young | Advanced Periodontal Instrumentation (ODHA / Trish O'Hehir, RDH, 3/4/06, 6 CEU) | Continue to improve and add clinical instruction for students |
| | Management of AIDS Patients (OHSU, Dr. David Rosenstein, 12/07, 2 CEU) | Add on-line student reading assignment with follow-up discussion board activity to develop more awareness about disease management |
| | 2006 ODHA Alternate Delegate for ADHA Annual Session held in Orlando Florida; attended forums, courses and networked with dental hygienists and dental hygiene educators; specifically Dental Hygiene Educator's Forum | Added discussion topics for student professional development, future of profession, access to care issues all in dental public health |

| | |
|---|---|
| (ADHA Annual Session / Anne Battrell, RDH, MS, Executive Director, 6/21/06, 2 CEU) | |
| “UP Close and Personal” Clinical Observation Skills (Jon Gietzen, PA-C, MS, Pacific University, 9/14/07, 3 CEU) | Enhanced student clinical processes for head & neck exam in preparation for WREB clinical board exams |
| Considerations in Nursing Home Care, Katie Farrell, PT, MS, GCS (ODHA and Pacific University , 9/15/07, 3 CEU) | Assisting students who choose geriatric care as their year-long student outreach project. Enhanced public health discussions about this population. |
| The Consummate Dental Hygienist (Dianne Glasscoe, RDH, BS, ODHA, 10/25/07) | Enhanced dental CDT-coding for students and initiated some scripting for patient communication regarding periodontal treatment |
| Ethics and Jurisprudence for Unsupervised Practice with Limited Access Patients (Dana Lillie, RDH, BSDH, MS, ODHA and Pacific University, 9/15/07, 2 CEU) | Added live and on-line discussion topics for public health courses |
| Cool Drugs You Might be Interested In (Sue Stein, BS-Pharm, MS and Brad Juhisake, BS-Pharm ODHA and Pacific University, 9/14/07, 3 CEU) | Enhanced clinical processes and patient assessment, especially for periodontal patients |
| UTHSC Dental Hygiene Educator’s Workshop: Assessing Student Portfolios (University of Texas San Antonio Dental Hygiene Program, 5/08, 12 CEU) | Developed and implement students portfolios for student assessment and self reflection for duration of 2 year program |
| Advisory Board Member of Pacific University’s Dental Health Professions Program (2005 to present) | Allows for collaborative efforts between the two dental hygiene programs, specifically community rotation sites |
| Member of ODHA Government Relations Council (2005-present) | Communicate Oregon dental hygiene legislative initiatives and scope of practice issues with students in public health; initiate discussion |
| ODHA Student Advisor for PCC dental hygiene students (2001 – present) Member of professional organizations - ADHA, ODHA (1996-present) | Assist students with professional development and leadership activities with the association members |
| Consultant for Willamette Dental: Periodontal Hygiene Educator (1996-present) | Apply quality assurance and improvement processes with clinical operations. Maintain best practices for periodontal assessment, therapy and evaluation for students in clinic; continual updates for clinical chart forms and student self-reflection regarding clinical patients |

| | | |
|--|--|--|
| | PCC Dental Hygiene Team with Medical Teams International Mission Trip to Honduras (April 2006 and April 2007) and El Salvador (May 2007) | Lead and instruct team of dental hygiene students in international service-learning activities; students enhanced cultural awareness, students performed dental treatment and provided oral health education, students performed self-reflection in journals, students created presentations about their trips |
| | Advisory Board Member of Eastern Washington University Dental Hygiene Degree completion program (2002 to present) | Allows for collaborative efforts between PCC students transitioning to bachelor degree completion |

| Instructor | Professional Development | Changes to Curriculum |
|---------------|--|---|
| Nancy Pilgrim | CPR renewal, BBPathogens Training, Medical Emergencies Update | Update of Med. Emergencies course info. |
| | CE Course Attendance: Drugs, bugs, and Dentistry, What's new in Dental Pharmacology, Rx writing for the Dental Hygienist | Incorporated new/emerging info into clinic, medical emergencies and oral pathology courses. |
| | CE Update in Oral Pathology | Update of new info in oral pathology course |
| | CE Diagnosis and Management of Oral Mucosal Diseases. Understanding your Dental Patient with significant medical disease, part III. | Incorporated new/emerging information into clinic, med emerg and oral pathology courses and head and neck anatomy |
| | CE, Fat cells and Inflammation: heart disease, Alzheimers, Diabetes | Incorporated new information into courses |
| | Presented Medical Emergencies update to DA students, and Dental Office Private Practice presentation to DLT Students. | Collaboration with other dental programs in department, team building. |

B. Describe any significant shift in student demographics within your discipline and how that has impacted instruction.

When compared to the National Average for enrolled dental hygiene students, PCC statistics reveal more diverse demographics in the areas of gender and age.

When compared to the general PCC population, the DH distribution reveals a higher student population of females than the general college population, but a higher percentage of older college age students.

Ethnicity and race demographics will be discussed in Section E.

| Year | Age Distribution | | | | | | | | | |
|-----------|------------------|--------|-------|--------|-------|--------|-------|--------|------------|--------|
| | 23 and under | | 24-29 | | 30-34 | | 35-39 | | 40 or over | |
| | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| 2007/2008 | 1 | 8 | 0 | 15 | 0 | 8 | 1 | 5 | 1 | 2 |
| 2006/2007 | 1 | 11 | 0 | 14 | 0 | 6 | 1 | 3 | 1 | 3 |
| 2005/2006 | 0 | 3 | 0 | 12 | 1 | 6 | 1 | 9 | 1 | 7 |

Resources: ADA Annual Surveys

2006/07

Gender: **Ntl. Avg** is 2.4% Male and 97.8% Female.

PCC DH Avg. is 7.3% for Male and 92.7% for Female.

PCC College is 44.2% Male and 55.8% for Female

Gender: It is not surprising that the PCC DH program more closely resembles the statistics for the gender national average as compared to the PCC College general population, as Dental Hygiene is and has been predominantly a profession attracting women. It is important to note that PCC DH % for male students is 3 times higher than the national average however. There is not an impact on instruction based on gender.

Age: **Ntl. Avg** is 23 and under (35.5%), 24-29 (32.6%), 30-34 (14.0%), 35-39 (7.4%), 40+ (6.5%)

PCC DH Avg. is 23 and under (30%), 24-29 (35%), 30-34 (15%), 35-39 (10%), 40+ (20%)

Resource: ADA Annual Survey

PCC College is 20 and under (24.6%), 21-25 (26.3%), 26-30 (17.2%), 31-40 (17.2%), 41+ (14.8%)

PCC DH Avg. is 20 and under (0%), 21-25 (26.1%), 26-30 (23.9%), 31-40 (34.8%), 41+ (15.2%)

Resource: PCC Institute for Effectiveness

Age: The PCC DH program reflects the general college population for the age 21-25 student, but is above average for the older college age student. The older age student is also represented at a greater % in the DH program at PCC than with the National avg. The instruction is impacted in a positive way by the enrollment of older than average students. These students bring experience to the learning process that helps the younger students to grow by learning from them. The younger student, by contrast, is able to teach the older student how to implement and use technology more as a method to learning. Both groups benefit from each other.

C. Give examples of how feedback from students, business and industry, community groups, or institutions our students transfer to, was used to make curriculum or instructional changes.

Feedback for the previous three years from students, business/industry and community groups is indicated in the table below. Included is a list of resulting changes to the curriculum based on the feedback given.

| Feedback Year/Source | Feedback Given | Resulting Changes To Curriculum |
|----------------------|---|---|
| 2007/2008 | | |
| Student Exit Surveys | <p>More experience with electronic charting. Develop electronic pt. mgm system.</p> <p>Add new community rotation site</p> <p>Get restorative cert. for students</p> <p>Increase Insurance Coding Use</p> <p>Have DH and DA students work together</p> <p>Increase instructor calibration</p> | <p>Increase use of Digital scanner for Radiology. Had soft-ware developed for clinic attendance. Carey took Access courses and began development of pt. mgmt. program...estimate completion Su'08.</p> <p>Veteran's Hospital Rotation Site added.</p> <p>Restorative curriculum developed, approved by OBD. Clinic Retrofitted to accommodate restorative instruction. Second year students required to list insurance codes in chart documentation notes.</p> <p>Winter term rotation on Wednesdays for DA/DH students to work together.</p> <p>Faculty CE given in perio therapy, Rx writing, E/I exam. Faculty retreats scheduled for Summer and Fall.</p> |
| Alumni Surveys | N/A (will send one yr. after graduation). | |
| Employer Surveys* | <p>1. 46/133 returned, 35% Return rate</p> <p>2. 47% currently employed PCC Grads. (88% of those not employing PCC Grad would consider employing, 12% N/A for DH employment).</p> <p>3. #years PCC Grads employed range = .5 – 32. (Median # years =8.5)</p> <p>4. Skill Performance and Professionalism questions = 90% Excellent/Good Responses, 10% Fair.</p> <p>5. 17% Would, 5% Might utilize DH for restorative tx.</p> <p>6. 33% expect DH to utilize paperless charting</p> <p>7. 52% expect DH to utilize paperless scheduling.</p> <p>8. 44% expect DH to use digital</p> | <p>1. Good Return Rate</p> <p>2. PCC grads are employable, no action needed.</p> <p>3. PCC grads remain employed, no action needed.</p> <p>4. Outcome met for 26 out of 29 categories. Increased instruction in the 3 areas rated "Fair" (tobacco cessation, Use of insurance codes and controls pain/anxiety with Anesth).</p> <p>5,6,7 Work towards implementing Restorative program, and paperless charting/scheduling</p> <p>8. Wish list Digital sensors/computers</p> |

| | | |
|----------------------|--|---|
| | imaging. | |
| Advisory Committee | <p>Committee/Dean discussion of restorative curriculum: curriculum should involve more than OBD minimum requirements to insure competence for patient care. Continue providing survey results to committee members. Possible addition of local anesthesia administration at Russell St. and VA Hosp. Community Presentations refined for Sp. Mtg. Fall meeting to be welcoming BBQ for DH, DA, DLT students and network with advisory comm..</p> | <p>Curriculum development will include enough hours and skill practice to ensure competency.</p> <p>Summaries to be given yearly for grad employ., alumni info, demographics Cara to work with rotation supervisors, Josette to ck with risk management. Format developed</p> <p>Burkhart Dental to sponsor, meet/eat full group and break out of programs.</p> |
| Community Rotations | <p>Provide cassettes for sterilizing instruments at rotation site. Want more experience at various community rotation sites. Want to observe an LAP DH.</p> | <p>Procured cassettes. Added additional site at the VA hospital. Currently networking with 2 LAP DH's for possible rotation site additions.</p> |
| 2006/2007 | | |
| Student Exit Surveys | <p>More community opportunities Update Radiology Equipment Increase use of + not – criticism More individualized clinic instruction Provide family orient. to new accepted</p> | <p>Additional rotation being developed VA. New Pano and 2 new xray units added. Develop faculty workshop for 07/08. Add 4th instructor during critical times to coach. Began 1st yr/family Intro session in June</p> |
| Alumni Surveys | <p>Improve Instructor Consistency Improve tx planning for perio Addtl. Dental Ins. Code training. Increase Sharpening Instr. Need Instruction on Electronic Charting.</p> | <p>Calibration exercises for instructors for coaching, rad grading, clinic test cases, mock boards. Re-design of tx plan form, instructor workshop</p> <p>Added all xrays need ins. codes listed.</p> <p>Add 1:1 advisor session with student and one full clinic to practice sharpen. Additional presentation by Dr. Stewart/OHSU Researched software/cost: Axium, Daisy, Dentrix, Eaglesoft</p> |
| Employer Surveys | <p>N/A, Revision to survey this year. Will distribute during 07/08 yr.</p> | <p>Worked with Institutional Effectiveness, advisory committee, faculty to revise.</p> |
| Advisory Committee | <p>Mission/Role of Committee Employer survey revision Electronic Records Instruct. Mock Interviews for students Community Presentations</p> | <p>Mission Developed, Length of Terms and Roles Feedback for revision and inclusion of technology/emerging trends ?'s Dr. Stewart to present to second year students Community Dentists to be asked to participate Students presented to/discussion with committee/guests</p> |
| Community Rotations | <p>Get better instruments to use for patients at rotation site. Students did not have a positive experience with the on-site DH</p> | <p>Replaced worn out instruments.</p> <p>Discussed with DH on-site mentor in the mobile van the student concerns. Did not renew mobile</p> |

| | | |
|----------------------|---|---|
| | mentor. | van rotation site for following year. |
| 2005/2006 | | |
| Student Exit Surveys | More Instrumentation Instr. Increase pharmacology in clinic Have patients prescreened | Revised 1:1 coaching requirements and form. Added student look up each pt. med prior to screening by doctor, indicate dental consideration with Rx. Developed prescreening appt for improved pt. assignment to appropriate student/physician consultation prior to tx. |
| Alumni Surveys | Increase Dx/Tx plan Instr. for perio patients Spend more time xray interp Improve Instructor Consist. Need Computer charting Instruc. | Added more instr. in DH 201 and DH 261, changed perio total care assessment form. Dev. xray critique form for all FMX, Dr. reviews w. student Added PT staff meetings every other week. Added session with DA instructor who teaches computer programs to DA's in HT 301 computer lab. |
| Employer Surveys | N/A Distributed once every three years. | |
| Advisory Committee | N/A - | Restructuring of committee and new members to be instated. First meeting scheduled for Fall 2006 |
| Community Rotations | Improve process in preparing students for rotation site, specifically directions to the building and how to read their charts. Students did not know what to expect regarding a patient with HIV/AIDS | Printed driving instructions for students. Arranged for consistent office orientations for students by the DH on-site mentor. HIV/AIDS rotation site dentist/founder arranged to present information to students and have Q&A session with students and an HIV/AIDS patient. |

Please Refer to Exhibits: 3-C1 Complete Summary of Employer Survey Results
3-C2 List of Advisory Committee Members and Professionals who enhance courses with CE presentations.

D. *What Strategies are used within the discipline/program to increase enrollment, improve student retention and student success.*

The DH program is limited in enrollment capacity by faculty-to-student ratios (determined by the CODA Standard), Clinical Space, and the budget approved by the college. The program currently enrolls students into the program on the basis of a maximum of twenty students for each of the first and second year classes. The following describes situations when a class may have less/more than 20 students enrolled:

- Occasionally a student must postpone completion of the program due to unforeseen personal problems. The program allows these students to re-enter the program in the following year at the point where they had withdrawn.

Example:

2007/2008: 21 students graduated from re-entry of student who had withdrawn for personal/medical reasons.

- A student may determine they no longer wish to pursue a degree in dental hygiene and choose to withdraw. When this does occur, advising with the program director/advisor/lead instructor takes place to ensure the student is certain of her/his choice to withdraw. College counseling resources are offered when applicable. If this occurs early enough in the first term of training, an alternate may be accepted into the class in order to maintain maximum enrollment.

Example:

2005/2007: 1 student withdrew Spring Term for personal/medical reason.

Replaced by a transfer student from ODS/OIT DH

3 students withdrew for wrong career choice

(1) student withdrew four weeks into Fall Term

Replaced by Alternate

(2) students withdrew Winter Term

Replaced by two transfer students from ODS/OIT DH

Result: 2007 graduated 20 students for maximum enrollment.

2003/2005: 1 student withdrew end of first week Fall Term because of wrong career choice (*Replaced by Alternate*). Twenty students graduated 2005.

Additionally, enrollment in courses DH 127, 128, 129, 246 and 260 may have additional students enrolled who are preparing to become Denturists, licensed by the State of Oregon Licensing Board. These students must show evidence that they have taken the necessary course prerequisites and may be enrolled in these specific courses to meet licensing requirements.

The faculty and program director work diligently with students who are struggling in any program course. Advising/Student success resources are made available to them as well as tutoring and additional one-on-one skill improvement sessions. Students develop an individual contract for completion of work when a grade of "incomplete" is earned.

The Dental Hygiene program's excellent retention rate is evidenced by graduating the maximum enrollment of 20 students for the years: 2004, 2005, 2006, 2007 and (21) students 2008.

E. Report any changes made in the last three years to increase student access and diversity.

The program has been increasing its diversity of student population yearly. The following table describes the diversity of the students enrolled in the dental hygiene program for the last three years:

| School Yr. | African American | Asian/Pacific Islander | Amer. Indian/ Alaska Native | Hispanic | Caucasian | Other |
|------------|------------------|------------------------|-----------------------------|----------|-----------|-------|
| 2007/2008 | 0% | 20% | 4% | 6% | 66% | 4% |
| 2006/2007 | 0% | 17.4% | 4.3% | 7% | 71% | 0% |
| 2005/2006 | 0% | 13% | 2.2% | 2% | 83% | 0% |

*Resources: ADA Annual Surveys
PCC Institute for Effectiveness*

While the above statistics reveal 0% for enrollment of African Americans in the last three years, the program has had graduates from this race/ethnicity in the past. The 20 Applicants accepted into the program are chosen from a pool of 150-200 people yearly. A point system is used based on science scores, overall GPA, previous dental experience/job shadowing and prior completion of general elective courses. These rating criteria have been shown as effective determiners in relationship to successful completion of the program and National Board Exams. The system is objective and provides equal opportunity to all qualified individuals. In addition, the program chooses 20 alternate applicants for enrollment, in the event accepted students choose not to attend the PCC program. These applicants are determined to be alternates as ranked in the point system. Once an alternate however, they are admitted into the class not only by points, but according to considerations given to their essay which discusses their career goals, unique abilities and also the number of times they have applied to the program. This consideration allows for acceptance of those who would increase access to underserved and culturally diverse populations and also promote the profession through furthering their education and assuming leadership roles.

The DH program continually seeks to increase student access by offering an affordable method of obtaining their education. PCC is the most affordable when compared with the other dental hygiene schools in the metro area and in Oregon, and also with the national average.

| School: | PCC | Lane CC | Mt. Hood CC | Pacific Univ. | OIT | Clark College | Ntl. Avg. |
|--|--------|---------|-------------|---------------|--------|---------------|-----------|
| Cost of tuition, books, instruments, fees: | 11,365 | 16,810 | 16,120 | 21,700 | 14,365 | 18,399 | 15,470 |

Resources: ADA Annual Surveys 2006/2007

The development of more online instruction has occurred allowing more flexibility in scheduling and the ability to work if necessary.

2007 and 2008 Dental Materials Lecture

2006,7,8 Community Oral Health Hybrid

As curriculum is added or revised, SAC discussion occurs to establish whether online development would be appropriate for the course.

F. Identify any operational issues faced by the SAC that impact student learning in your area, (e.g. facilities, availability of part time faculty and other needed resources).

The following areas have been identified by the SAC as impacting student learning. In addition, meeting accreditation standards as well as privacy laws are also impacted by these issues.

Facilities:

Size of dental clinic chair space: The typical dental office treatment space is 10' x 11'. Currently the PCC clinic chair tx space is 6.5' x 9'. CODA Accreditation standards states the dental hygiene facility must contain the following, "...an area that accommodates a full range of operator movement and opportunity for proper instructor supervision." (CODA standard 4-1a.) Given the smaller space, student movement is impeded when all of the chairs are occupied in the area; it is difficult for an instructor to observe/instruct the student at chairside; and, an assistant can not be utilized by the dh operator.

Patient privacy: It is difficult to keep patient information private as required by HIPAA laws, due to the clinic crowding. Reviewing patient medical and dental health information, proposed treatment, dental diagnosis and medical/dental referrals are all done chairside within the small area occupied by up to 15 other people. While a small conference room does exist for privacy when discussing particularly sensitive information, it is not possible to use for all twenty patients that are scheduled during a clinic session. In addition, CODA Standard 6-4 states ".....a written statement of patient rights should include: a) considerate, respectful and confidential treatment." While the program has a written statement that states the patient has the right to "expect that all records and communications pertaining to your health care are confidential," it is difficult to establish this in the current clinical setting.

Shared space with DA's: Currently the space is shared with the dental assisting program in such a way that instruction is not impacted. On the days when both programs utilize the clinic, the DH students are scheduled with only half of the class in clinic. The impact is a budgetary one; Rather than having four instructors for twenty students (1 dentist and 3 dental hygienists), we must schedule three clinical instructors for ten students and another three instructors when the second half of the class is scheduled (1 dentist and 2 dental hygiene instructors). When twenty students are scheduled, each credit/term of clinic equals faculty cost of \$5,935. When two sections of ten students are scheduled the faculty cost for the two

sections combined is \$9,126. The necessity to schedule students in two sections occurs once in Fall term and once in Winter term for increased faculty cost of \$6,382 yearly (2007/08 budget figures used)

Need For Computer and Software Technology:

The ability for the DH program to provide the computer technology that is in current use in dental practice is limited by two constraints: Space and Budget.

The current clinic space does not allow for room to install computers/monitors at each dental unit and the funding has not been available for the purchase of the needed technology. The result are students who are less prepared to work in practices that utilize paperless charting, computer appointment scheduling and digital radiography (while the program does have phosphor plate digital radiography available, it is only utilized currently on dental manikins. It is not possible to expose radiographs digitally on patients until computers are installed at the units).

Burkhart Dental Supply supports the PCC DH program by providing CE courses to students and faculty in the newest technology and by also having representation on the program's advisory committee. The following statistics have been provided by Burkhart as examples of the current computer technology usage in Oregon dental practices:

% of practices using software scheduling programs = 95%

% of practices using paperless charting programs = 50%

% of practices using digital radiographs = 30-35%

Phosphor plates = 7-10%

Sensors = 23-25%

Many offices use both types.

The 2008 Employer Survey supports the need for educating students with computer technology prior to graduation. Results of the dentists responding were:

“I expect my DH to use Paperless Charting Systems” = 33%

“I expect my DH to use Paperless Appointment Scheduling” = 52%

“I expect my DH to use Digital Imaging” = 44%

Upon Graduation the 2008 student exit survey revealed comments regarding improvement in the program is needed by: “updating to digital and electronic records.”

Alumni Surveys from both 2005 and 2006 also indicated the need to improve by adding electronic charting.

The program would be further strengthened by the addition of available computer software programs that would not only be used for appointment scheduling, paperless charting, and digital radiography, but would also track student competencies and clinical progress. CODA accreditation standard 2-20.2 states: “describe the monitoring system used to assure that all students have attained clinical competence and exercise appropriate judgment.” To adequately demonstrate this, it is currently necessary to enter paper records into an excel

program for approximately 400 patients each term. This is done by the dental receptionist and amounts to an enormous amount of time taken out of her busy work load. Chairside computers would allow for student/patient grade tracking to be completed electronically by students and instructors at each appointment and reports retrieved as necessary.

Faculty/Staffing Issues:

The current CODA Standard 3-6 Regarding Faculty to Student Ratios has been changed from preclinical, clinical and radiographic sessions of 1:6 and lab session of 1:15 to the following (effective January 1, 2009):

“The faculty to student ratios for preclinical, clinical and laboratory sessions must not exceed one to five. Laboratory sessions in the dental science courses must not exceed one to ten...”

To meet this standard for the 2010 Accreditation Site Visit, the DH program will have the following needs:

- Preclinic DH 104 will need additional 66 hours of PT instructor hours = **\$3,194** (approx)
- DH 113L (Oral Anatomy Lab) will need 33 hours additional PT instr. hours to release Dr. Pilgrim from clinic instruction so that 2 sections of DH 113L can be offered (10 students each section) = **\$1,597** (approx).
- Radiology DH 109L and DH 210 will also need additional 60 hours of instructor time. Currently the radiology labs are instructed at a 1:10 ratio and will need to be reduced to 1:5 ratio because of the clinical/patient care application. The Program Director, as past radiology instructor, will provide the additional instruction hours needed in these labs to offset the need to pay for additional PT instructors. Addtl cost = **\$0**

Total increased PT instructor costs to comply with new accred. standard = **\$4,791** (approx).

Other Needed Resources:

Addition of Restorative Program Embedded into the DH Program –

In May 2007 the Oregon Board of Dentistry (OBD) approved into the State Dental Practice Act Rule 818-035-0072; Restorative Functions of Dental Hygienists.

Justification of Need:

1. Offer DH Students an educational program that meets the full scope of practice allowed by state law.
2. Remain competitive with other OR and WA schools (all of which are already offering this program to their students).
3. Graduate Dental Hygiene students who will be able to address Access to Care issues of the community and State by providing restorative care.

What the Program has Already Done:

1. Developed the curriculum (14 credit hours), sequencing, instructor needs and materials cost.
2. Had the clinic retrofitted to enable the restorative program be taught (\$18,000 provided by Perkins Grant Spring 2008).
3. Submitted Restorative curriculum to the OBD and gained approval by board to offer (June 2008).

The above were accomplished through consultation with the division dean and SY Dean of Instruction.

What is Still Needed:

1. PCC Curriculum Approval (propose offering as experimental/optional course 1st year until full curriculum approval can be obtained and applicants can be informed of the additional inclusion and costs of the program).
2. Costs of Handpieces to perform restorative cavity preparations. Cost = \$12,931 (a-dec company has discussed the possibility of providing for half of the cost if PCC would commit to paying the other half which would reduce this cost to approx. \$6,500).
3. Additional instructor/dentist needs to teach new curriculum and meet accreditation standards = \$49,000 (approx). FTE gained is 12FTE
4. Additional Demo supplies, Tx materials/instruments/supplies for 1st yr = 12,936 (approx).
5. Additional Tx materials/instruments/supplies for each year thereafter = \$5,500.

What the Students Want:

March 2008 survey of all current First and Second Year Dental Hygiene Students

Results:

2009 Grads:

45% feel it is *Extremely Important*, 20% feel it is *Important*, 35% feel it is *Somewhat Important*, 0% feel it is *Not Important* to become Restorative Certified.

2008 Grads:

25% feel it is *Extremely Important*, 40% feel it is *Important*, 10% feel it is *Somewhat Important*, 25% feel it is *Not Important* to become Restorative Certified*

*2008 grad results may be skewed due to the fact the survey was handed out the day before they were scheduled to take the WREB Anesthesia Clinical Board.

Combined 2009 and 2008 Grads:

63% of all students would rather do the restorative courses while in the PCC DH Program

30% would rather do a CE

12% said they were not interested at this time (n=5), but if they were interested (1) would rather do it while in the program, (1) as a CE and (3) didn't want to do either.

5% (n=2) would be interested after working in the field for several years.

Please Refer to EXHIBIT 3-F for Summary of Restorative Program Needs

Future Issues:

Profession Suggesting Minimum Entry Level of Bachelor's Degree:

Over the last two years the Advanced Dental Hygiene Practitioner Task Force has been drafting proposals to increase the minimum education level for entry into the profession to become the Bachelor's Degree. Given the fact that currently 83% of dental hygienists receive an Associates of Applied Science degree prior to licensure (ADA 2006/07 Survey pg 8), this increased degree for minimum entry may not come to pass anytime soon. The initial stages of proposal development and adoption are still in the beginning stages and it is too early to understand the full impact to associate degree programs. In the event that proposals are finalized and adopted, It will be important for PCC to strengthen articulation agreements with other four year institutions, such as Pacific, OIT, and EWU to allow seamless transitions for PCC students to pursue the DH Bachelor's Degree.

Program Review Outcome 4

To develop recommendations for improvement in the program/discipline.

A. *Assess the strengths and areas in need of improvement in the program/discipline.*

Strengths:

- With only a few exceptions, the program is meeting its goals for Access, Student Success, Diversity, Continuous Improvement, Cultivating Partnerships, Community and Ethics and Responsibility. The areas for improvement are listed under *Weaknesses*.

Please Refer To EXHIBIT 1-A for Assessment of Goals.

- The program has an excellent reputation within the dental community as evidenced by 100% of employer respondents agreeing that they would hire a PCC graduate for employment.
- The program has excellent relationships with community and international partners through oral public health service learning projects. Because of the students' efforts, people without access to care receive vital dental hygiene education and services.
- The program has an excellent reputation within the community members who seek care in the dental clinics at PCC. This is evidenced by the 98.7% "Agree" Responses on Patient Satisfaction Surveys.

- The program is staffed by faculty and staff who are dedicated to the mission of the college and the dental hygiene program. They act as role models and mentors and have a passion for the professions and for helping the students succeed. Many of the part time faculty have been teaching here for 20-30 years and the full time faculty have been employed for 6-10 years. Only one FT faculty has been here for one year and was hired to replace the full time faculty member who became the director.
- The retention rate for student completion of the program speaks to the dedication of the faculty in mentoring students for success. The Dental Hygiene program's excellent retention rate is evidenced by graduating the maximum enrollment of 20 students for the years: 2004, 2005, 2006, 2007 and (21) students 2008. As an accreditation site visitor for CODA, the program director can attest to the fact that the retention rate of faculty members and DH students is phenomenal.

Weaknesses:

- The PCC program is one of only a couple programs in the State who does not yet have patient management software for paperless charting and digital radiograph data gathering.
- The PCC DH program is not compliant with the new CODA Standards for faculty:student ratios in the courses for Preclinic, Radiology Lab and Oral Anatomy Lab.
- The PCC DH program is the only Oregon Program who has not implemented the Restorative Curriculum necessary for students to take the WREB Restorative Board and apply for Restorative Credentials through the Oregon Board of Dentistry.
- Clinic Space does not allow for Patient Privacy during review of the patient's health history and during diagnosis, treatment planning and provision of treatment. This lack of privacy violates HIPAA regulations that are in place to protect against the sharing of patient information with others. In addition, the clinic crowding results in limited range of movement by the operator during treatment and instruction. Safety becomes an issue when all dental units are being utilized for patient care in the clinic by students.
- Alumni and Employer Surveys have indicated that increased instruction is needed in Risk Assessment of the Patient for Caries and Tobacco Use; Application of Dental Insurance Codes, and addressing pain and anxiety during treatment. It is important to note that most of these comments were revealed on Employer Surveys where DH's have been employed for ten to 20+ years. The areas indicated have been included in the curriculum as this information emerged and the instructors will continue to enhance these areas and other new emerging areas on the horizon.

- As a program that bases instruction on scientific evidence, new emerging information is constantly being reviewed through journal articles, continuing education courses and attendance and participation in professional association activities. The monetary strain put on faculty to maintain the high level of excellence for incorporating this emerging information is difficult due to the constraints of professional development monies allotted each year. The faculty and director have written grants as often as possible requesting staff development monies, but are limited by the frequency they can apply and the amount that can be distributed. As a member of the staff development committee, the program director is aware of the committee's concern over the number of grant applications received by the dental hygiene staff members, but she supports them in their desire to stay current in teaching and the profession and encourages their grant applications.
- The program would like to increase the diversity of its student and faculty population to reflect more of the community. Applicants are chosen through an objective admissions process that has proven select students with the potential for success. It does not however reflect diversity of all ethnicities. In addition, it is also difficult to employ a diverse faculty. Nationally, there is a growing shortage of qualified dental hygiene faculty applicants for teaching positions that become available. While hiring processes of the college promote diversity, it is difficult to obtain a diverse faculty when few numbers of applicants apply for an open position.

B. Given the above analysis and other findings of the SAC in this review process, prepare a set of recommendations that cover areas such as curriculum and professional development, recruitment and retention of students, obtaining needed resources, and being responsive to community needs.

Recommendations:

1. Clinic space, patient privacy, shared space with the DA Program and Paperless Charting System is being addressed in the upcoming Bond Measure. If the Bond Measure does not pass, the program will do its best to demonstrate during the 2010 Accreditation Site visit that we are meeting the standards for "patient privacy" and "clinic working space that allows for full range of motion" by the operator during treatment and instruction.
2. The faculty to student ratios in preclinic and oral anatomy labs would also be addressed through the bond measure, because if passed, the DH and DA programs would be able to run both clinics simultaneously. The monies saved from not having to run two sections of DH clinics (10 students with three instructors each, instead of one section with 4 instructors) could be used towards increasing the needed faculty:student ratios in preclinic and oral anatomy lab. If the bond measure does not pass, the additional faculty money may have to come from an increase of approximately 4,791.00/year to the PT Faculty Budget.

3. Implementation of the Restorative Curriculum for Enrolled Students into the Program is an issue that may need to be addressed as an initiative of the Division. The program director is also working with Irene Giustini on the possibility of developing a CE restorative program for practicing Dental Hygienist's and Dental Assistants to enroll in. If successful in this attempt, the CE Course would utilize the dental clinic and could have shared costs and additional revenue from patient's pay for service. This CE could be the substitute for the embedded curriculum that we desire to have for the enrolled students. Obtaining their training in this manner would delay their endorsement to practice this skill upon graduation and would involve additional CE course costs that would not be covered by financial aid.

4. Increasing professional development monies allotted to faculty would improve their ability to take advanced CE courses in emerging technologies of the field and delivery of improved clinical teaching methodology. Currently each FT faculty member is allotted 290.00 per year for professional development. Most CE and professional association activities for DH educators are offered at sites that include travel. Registration fees are high and overnight stay is necessary. Any increase to the yearly funds available, or increase to frequency of staff development grant application would assist them in lowering their out of pocket costs. Since each faculty member teaches courses in different topics, it is not beneficial for them to pool the monies and send one member each year to a meeting. This would result in information that could be shared with the other faculty members, but not relative to what they teach. In addition, each faculty member would only have the opportunity to have access to the newest emerging information and teaching practices once every three years.

5. Increasing the applicant pool and enrollment of more diversified students is a challenge across the nation. Researching, networking with the health admissions advisors and most importantly, time, are necessary to revise and incorporate acceptance criteria that would help to meet this goal using objective criteria that also supports the acceptance of students who possess the potential for success in completing the demanding curriculum. Currently, due to the fact that the program director is responsible for three programs, each of which is undergoing Accreditation as well as program review in the near future, does not have the time to devote to the research necessary. A possible solution would be to pay a part time faculty member with special project monies to work on admission criteria efforts. Recently, the Oregon Health Career Center has contacted the PCC Health Admissions Office about providing services to first-generation and low income students in an effort to promote health professions and provide them with the needed resources to be successful in their career track. This resource will be available during the current year and assessed for its effectiveness in the future.

As the diversity of students in each program increases, eventually applicants for teaching positions will also increase in diversity.

6. Articulation agreements with Pacific University Bachelor's completion program should be developed to assure the continuation of education for students wishing to obtain their Bachelor's Degree upon graduation. In the last 5 years many students have sought to obtain their Bachelor's Degree through Eastern Washington University, Oregon Institute of

Technology, University of Kansas and also Pacific University. Many of these completion programs are offered online with minimal on-site meetings. There has never been a problem with the transferability of PCC Credits. Should ADHA's initiative of the bachelor degree becoming the entry level of education needed to practice dental hygiene become a reality, the community colleges will have to strengthen articulation agreements with four year institutions.

Program Review Outcome 5

To ensure that curriculum keeps pace with changing industry demands and continues to successfully prepare students to enter into a career field.

A Evaluate the impact the advisory committee has on curriculum and instructional methods.

The PCC DH Advisory Committee follows the college's guidelines for Advisory Committees. The advisory committee was reorganized in Fall of 2006 and has met once each term since then. The members have the role of advising the program to ensure the students' learning is relevant to current professional employment practices. They also provide support, advice, information and recommendations to relevant matters of the program.

The Committee has the following mission:

"The PCC Dental Hygiene Advisory Board is committed to helping students have the best possible experience during their educational program by addressing student, staff, patient and community needs through the sharing of their guidance, expertise and knowledge. The committee will provide a link to the community and profession while promoting student success prior to and upon graduation and while supporting the values of the Portland Community College institution".

The following are examples of the impact the committee has had on curriculum and instruction:

- Provided input into the revision of the DH Program Degree Outcomes and also helped update the new Employer survey.
- Participated in an open discussion with faculty and the division dean regarding the Oregon Board of Dentistry approval of restorative functions for the dental hygienist.
- Provided Computer Application Presentations of Dental Software for patient management to students.
- Provided Digital, intraoral camera and advanced TMJ/Sinus imaging CE to students
- Attended student community dentistry project presentations and led discussion with students on the topic of increasing access to oral health care and civic engagement.

- Acted as potential employers and provided mock interviews for students Spring term prior to employment search.
- Welcomed students at the beginning of the school year with a Kick-off bar-b-que and held a question and answer time with them.
- Provided students with international dental public health opportunities (in conjunction with Medical Teams International) on trips to Romania, Cambodia, Mexico and Honduras.

B *Review Job placement statistics of students in your program over the last three years, including salary information where available.*

Graduates of 2007: Email Survey revealed (N=20 out of 21 responded)
 18 out 21 had FT positions
 2 had PT positions
 Avg. salary = \$35+/hr (N= 6 responses on mailed alumni surveys)

Graduates of 2006: Alumni surveys revealed (N= 7 out of 20 responded)
 2 students working 35-40 hrs/wk
 5 students working 24-34 hrs/wk
 1 student earning \$35+/hr
 6 students earning \$30-34/hr

Graduates of 2005 Alumni surveys revealed (N = 10 out of 20 responded)
 5 students working 35-40 hrs/wk (1 is actually working 45hrs/wk)
 5 students working 24-34 hrs/wk
 1 student earning \$38-40/hr
 2 students earning \$35-38/hr
 7 students earning \$30-34/hr.

In addition, the following information was provided by the PCC Institutional Effectiveness Department: Of the 2003/04 Graduates, 3 continued enrollment in higher education; 19 were employed earning a median hourly wage of \$34.32 and of these 19 graduates, 89.5% were employed full time. These numbers support the high demand and secure employability in the field.

C *Analyze the program learning outcomes, competencies and skills as compared to the business and industry needs today and in the immediate future.*

The program SAC utilized the report "*Competencies for Entry into the Profession of Dental Hygiene*" as a guideline to develop student competencies that measure the student's ability within five domains: Core Competencies, Health Promotion/Disease Prevention, Community, Patient/Client Care and Professional Growth and Development. (Journal of Dental Education, 2005 pgs 803-807). This report and these competencies align with the Accreditation Standards for set forth by the Commission on Dental Accreditation for the educational programs that train dental hygiene students. Advisory committee, employer and alumni surveys all validate

the continued use of the learning outcomes and the competencies and skills that are taught and assessed in the program. Patient satisfaction surveys highly rate the interpersonal communication skills and level of professionalism displayed by the students and the program is fully accredited by CODA (without reporting requirements), which attests to the high standard of education the students are receiving. Board results from the three national and regional required exams validate that the PCC graduates are competent to apply for state licensure and begin entry level employment as a dental hygienist.

D Forecast future employment opportunities for students in your program.

Many resources forecast a positive outlook for future employment of dental hygiene graduates. The Bureau of Labor Statistics reveals that:

- Dental Hygienists rank among the fastest growing occupations, and job prospects are expected to remain excellent.
- Employment of dental hygienists is expected to grow 30% through 2016 much faster than the average for all occupations.
- Older dentists less likely to employ a DH will be retiring and replaced by younger dentists who are expected to hire one or more hygienists to perform preventative services.
- As dentist's workloads increase due to an increasing aging population who are retaining their teeth longer, the dentist will need to hire more hygienists to perform procedures. (www.bls.gov/oco/ocos097.htm last modified 12/07)

In a report titled "Assessing Oregon's Health Care Needs," Oregon Labor Information concurs that dental hygienists are one of the health occupations to be in a shortage. Through an Oregon Health Care Needs Assessment, it was determined that:

- Oregon will need 971 new dental hygienists due to industry growth and 316 due to replacement needs from 2004 to 2014 (equaling an average of 129 graduates a year).
- At the time of the report (2004), the Oregon schools graduated 76 students leaving a gap of 53. Two new dental hygiene programs were opened in 2005/2006 at ODS/OIT in LaGrande and Pacific University in Forest Grove (OLMIS, Turner, 2006).
- With the inclusion of these two schools the supply and demand gap will be closed as far as numbers go, but geographic location of the newly licensed hygienists may still result in shortages in the rural areas and overpopulation in the metro areas. The first class graduated from ODS/OIT in 2007 and from Pacific University in 2008. It is too early to assess the resulting impact on the PCC graduates employment opportunities from the addition of these new schools graduates.

Resources found on the American Dental Association website and the American Dental Hygienists Association website concur with the findings stated in these reports.

E Analyze any barriers to degree or certificate completion that your students face and describe the main reasons students leave your program before program completion.

Successful completion of the dental hygiene program is challenging, stressful and requires a great amount of determination, focus and desire. The excellent retention rate and graduate completion rates in the program is attributed to the above characteristics of the students as well as the commitment and passion for teaching that the faculty possess.

In the past seven years there have been no academic or professionalism dismissals from the program. The most common reason for a student to leave the program is due to improper career choice by the student. This occurred 3 times in 2005/06 and one time in 2004/05. In all cases the program was able to accept alternates or transfer students to allow for full capacity of the program. The acceptance criteria gives applicants points for having job shadowed in an office (minimum 20 hours) or having worked in the dental field (minimum of one year), in an attempt to ensure applicants are choosing their career wisely.

Students occasionally may also discontinue their training for personal reasons that are beyond their control. In this circumstance the program offers the student re-entry into the program in the following year for completion at the point of where they left. This occurred in 2006 when a student with a high risk pregnancy discontinued, but restarted the program the following year and was one of the 2008 graduates.

A key barrier to students always includes the financial costs of completing the program. In addition to tuition, fees and textbooks, the dental hygiene students have costs for instruments, supplies, three board exams and licensure with the state. The school financial aid resources have been a great support to students and the program alerts students to available scholarships as the opportunities occur. PCC dental hygiene students are frequent recipients of PCC Foundation Scholarships, as well as National ADA Scholarships and State Association sponsored scholarships. During the 2007/2008 school year the second year students were also able to work with the "Students in Service" program sponsored by Americorp and facilitated by the PCC Service Learning Coordinator. Through this program the students were able to apply for and receive funds that would off-set their student loans or for future education pursuits. The program is planning on supporting students' involvement in this valuable program again this year and in the future. Due to these resources and the fact that the PCC program is the most affordable in the state, the program has not lost any students due to financial constraints.

Summary:

Having the opportunity to participate in the program review required by Portland Community College has enabled the dental hygiene program to take a close look at its goal, outcomes, competencies and assessment measures. Also reviewed were the strengths, weaknesses, utilization of the advisory committee members and future employment outlooks for the graduates.

It is hoped that this report confirms the value of the program within the institution and its ability to educate competent graduates who will meet the oral health care needs of the community.

The program review has also determined deficiencies that exist and which can be remedied prior to the 2010 accreditation site visit. The program respectfully submits this program review report to the administrators of Portland Community College for their continued approval and support of the program.

Submitted by,
Josette Beach
Director, Dental Sciences

EXHIBIT 1-A
Assessment Plan for Dental Hygiene Program Goal Review

| Goal #1 | | | | | | | | |
|--|--|---|---|--------------------------|--|--|---|---|
| <u>ACCESS:</u> Provide access to quality DH education through the use of scientific evidence based instruction and technology that meets current industry standards. | | | | | | | | |
| | Objective | Monitoring Mechanism | Evaluating Mechanism | When Evaluated | Who Collects Data | Who Assesses Data | Results | Resulting Action and Program Improvement As a result |
| Goal #1 | Faculty retain current license/cert./CE | Employee Records | 100% have current License/CPR/CE | Yearly | Clinic Coordinator | Program Director | All Faculty have met | Addnl. Training Provided for faculty at hire and every 2 years on Clinic AED used |
| | FT Faculty attend all college inservice mtg | Attendance Records | 100% Attendance | Fall Winter Spring | Program Director | Program Director | All Faculty have met | PT faculty are offered stipends to attend. Those who do not are informed of inservice information through email or staff meetings. |
| | Faculty have current and advanced knowledge in subjects taught | Attendance at PCC offered CE courses. | Department attendance records. | Yearly offerings | CE Presenter | Program Director | Continued emerging info updates. Individual Responsibility Met | PCC offerings to Faculty: 2007 and 2008 Geriatric and Pedo Pharmacology. Current Perio Techniques Update on E/I Exams Rx Writing for the DH. Clinic Instr/Giving Feedback. *8 Faculty participated in PCC online instructional methodology courses in 2008. *Encourage attendance and distribution of Mtg. Minutes. |
| | | Outside CE Attendance DH Practice | Instructor Annual CV Update. Priv. Pract. Employ. or Profess. Involvement | Licensure Renewal CV | Clinic Coordinator Program Director | Program Director | All Faculty Involved | |
| | | Staff Mtgs/retreats | Attendance recorded | Bi-monthly and Biennial | Clinic Coord. | Clinic Coord and Pr. Dir | All faculty involved | |
| New Equipment upgrades yearly as budget allows | Yearly Budget Allocations | Available monies as determined by deans | Fall Winter Spring | Program Director | Division Dean | 2007 New Sterilizers, Xray Manikin, Nitrous Oxide Unit. 2008 Clinic Retrofit for Restorative, Attendance Software, 4 ultrason. scalers. | Continuing yearly improvement of technology to become more current with industry standards. | |

Goal #3

DIVERSITY: Enrich the dental hygiene student's educational experience by providing and promoting cultural awareness that acknowledges each individual's worth and uniqueness and enhances effective interactions, communications and/or provision of care with all individuals or groups.

| | Objective | Monitoring Mechanism | Evaluating Mechanism | When Evaluated | Who Collects Data | Who Assesses Data | Results | Resulting Action and Program Improvement As a result |
|----------------|---|---|---|---|--|--|---|---|
| Goal #3 | Faculty attend Cultural Awareness and Diversity Training offered by College | Human Resource Records | 100% Attendance Rosters | At Initial Hire and during continued inservice offering | HR/Program Director | Program Director | One New PT Instr. needs to attend | Program Director will schedule PT instr. for attendance at next inservice offering. |
| | Inclusion of Cultural Awareness in Curriculum | Course Syllabi DH... | Student Course Assignments | Midterm and end of term | Instructor | Instructor | 100% student pass rate in course | Student evaluations of course offer suggestions for improvement. |
| | Patients satisfied and will return and/or refer others | Patient Satisfaction Surveys | 100% Responses to survey ?'s #10-17 will indicate "Agree" | Completion of 1 st yr and 2 nd yr patients. Winter/Spring | Program Director | Program Director and SAC | 100% "Agree" | Continue with instruction and surveys |
| | Faculty belong to professional Organizations | 95% ADA and ADHA Member Listing | 95% Faculty membership | Yearly | Program Director | DH SAC | | Encourage membership to those not members. |
| | Professional Development offered to staff | Department monies. Staff Development grants CE offerings from | 100% Budget usage Yearly Grant applications and awards | Yearly for FT faculty Available quarterly to FT, PT with Assignment Rights | Program Director Staff Dev. Committee | Program Director Program Director | All FT Monies used Monies Granted each term applied for | |
| | | Professional Representatives | | Quarterly offerings | Lead Instructors | Lead Instructors | Not all Instr. able to attend | Extra handouts and video taping done for instructors unable to attend. |

Goal #4

CONTINUOUS IMPROVEMENT: Develop faculty and students who continuously seek to enhance knowledge as life-long learners by seeking peer support in professional associations, fulfilling evidence based continuing education and applying self-assessment and reflection skills.

| Goal #4 | Objective | Monitoring Mechanism | Evaluating Mechanism | When Evaluated | Who Collects Data | Who Assesses Data | Results | Resulting Action and Program Improvement As a result |
|---------|---|--|--|--|-----------------------------|-----------------------------|--|--|
| | Students are Dental Hygiene Association Members | Student Association Membership Applications | 100% Student Membership | Yearly | Student Association Advisor | Student Association Advisor | 100% 1 st and 2 nd yr. membership 2006,07,08 | Prior to 2006 membership was low, more student benefits and activities planned = improved student membership. |
| | Graduates will indicate interest in pursuing additional education and/or professional development | Exit Surveys of Current Grads. Alumni Surveys | 80% answer future goals in areas of completion of bachelor degree and/or ADHA association participation. | Yearly Spring Summer sent to grads from previous year. | Program Director | Program Director and SAC. | | <u>2007 Grads:</u> only 6 respondents to date indicate 5 want to pursue additional BS/or MS Degree, 1 indicates No <u>2006 Grads:</u> 5 indicate want to pursue BS/MS, 2 indicate No <u>2005 Grads:</u> 4 indicate want to pursue BS/MS, 6 indicate No |
| | Students participate in a minimum of 2 professional activities/yr. | Attendance Records | 100% student participation | Yearly Annual Session SADHA Mtgs. Advisory Comm CE, State mtg. WA Cty DH | Lead Instructor | Lead Instructor | 100% Participation | Stress level of professionalism expected at meetings. Continue to expand of # of opportunities available for the students to attend. |
| | Faculty will participate in CE and professional activities | Participation attendance records and CE evaluations | All faculty will attend at least 1 professional activity/PCC CE per year. | Yearly | Program Director | Program Director | 100% participation | Calibration of instructors on E/I Exam assessment, perio assessment, Rx writing. Improved positive feedback given to students by instructors. |

Goal #5

CULTIVATING PARTNERSHIPS: Create partnerships that effectively link students with practicing oral and other health care professionals who will provide advising, mentoring and enrichment experiences in preparation for employment upon graduation.

| | Objective | Monitoring Mechanism | Evaluating Mechanism | When Evaluated | Who Collects Data | Who Assesses Data | Results | Resulting Action and Program Improvement As a result |
|----------------|--|--|---|-----------------------|--------------------------|--|--|--|
| Goal #5 | Hold Advisory Committee Meetings 3x/yr. | Minutes of Meetings | Feedback from Advisory members | At each meeting | SAC Chair | SAC and Program Director | Goals and agendas set for each meeting | Restorative curric. Feedback; more student involvement w. committee; community project presentations given, mock interviews for graduates. |
| | Professional Education provided to students and staff. | Course Content and Syllabi | Scheduling of Presentations quarterly | Quarterly | Course Instructor | SAC | Content of Areas of presentations determined. | Scheduled Presentations: Digital Xrays, Intraoral Camera, Overall Health CE, Instrumentation, Oral Hygiene Compliance, Perio Therapy, Oral Cancer Screenings., HIV Tx, Lasers in DH, Oral Surgery and Implants, Smoking Cessation, The Systemic Link to OH. |
| | Provide international enrichment experiences | Partner with MTI and provide student's opportunity | MTI, student and In country hosts evaluations | Post trip | MTI and Program Director | Program Director and Accompanying Faculty Member | MTI, Students and in Country hosts all satisfied | Continue international enrichment opportunities yearly and partnerships with MTI. |

Goal #6

COMMUNITY: Serve as a key resource to the community by comprehensively preparing students to competently apply the dental hygiene process of care during treatment of patients at the onsite PCC clinic or while presenting oral health programs and care in community or more global enrichment experiences.

| | Objective | Monitoring Mechanism | Evaluating Mechanism | When Evaluated | Who Collects Data | Who Assesses Data | Results | Program Improvement As a result |
|---------------|--|-----------------------------|---|---|-------------------------------------|--|--|---|
| Goal 6 | Patients Satisfied with Treatment in PCC Dental Clinic. | Pt. Satisfaction Survey | Results indicate patients "agree" 95% of time w ?'s | Completion of 1 st yr and 2 nd yr patients. Winter/Spring | Program Director | Program Director and SAC | 98.7% Agree 1.1% "somewhat" 2 answers of "Disagree". | Continue with instruction and surveys. Stress informing patients of time commitment and information regarding referrals. |
| | Employers Satisfied with PCC DH Graduates they employ | Employer Survey | Results indicate ratings of "Excellent or Good" 95% of the time | Every three Years. | Programs Director | Institutional Effectiveness Department | 100-95% Excell. or good responses on 22 categories. 93%-84% for 7 categories | Increased emphasis in theory/clinic courses on topics: Performs Risk Assessment for Caries and Tobacco Use; Insurance Codes for Billing; Controlling pain/anxiety; Nutritional Counseling, Use of non-scheduled time effectively. |
| | Students contribute in positive manner at rotation sites | Rotation mentor evaluation | Evals indicate positive responses for 100% of students | Following each student rotation. | Community Instructor | Community Instructor | 100% of student received a mentor evaluation. | Continue to utilize student and mentor evaluation tools to maintain positive student experiences along with client satisfaction. |
| | Students effectively ADPIE* Community Project | Project Grade | 100% of students successfully pass | End of Spring Term | Community Instructor | Community Instructor | 100% students receive passing grades on reports. | Continue to hold individual group conferences to mentor each group with their project. Met with PCC Service Learning Coordinator for a list of partners of PCC to initiate and implement additional sustainable projects. |
| | Modified Care Patient Assignment. | Assignment Completion | 100% of students complete assignment | End of Spring Term, 1 st yr. | 1 st Yr. Lead Instructor | 1 st Yr. Lead Instructor. | All students Meet Annually | Annual re-assessment of assignment with changes to incorporate emerging info and feedback from st. and instrs. |

*ADPIE= Assess, Diagnose, Plan, Implement, Evaluate

Goal #7

ETHICS and RESPONSIBILITIES: Prepare the student to practice ethically and responsibly as a licensed Registered Dental Hygienist.

| | Objective | Monitoring Mechanism | Evaluating Mechanism | When Evaluated | Who Collects Data | Who Assesses Data | Results | Resulting Action and Program Improvement As a result |
|----------------|--|---|---|--|--------------------------|--------------------------|--------------------------------|--|
| Goal #7 | Students pass process evaluations on clinical patients | Clinic tracking/grade record for each patient | Each student will have no more than -5 1 st yr and -0 2 nd yr. in professionalism | Each Clinical Session | Clinical Instructors | Lead Clinical Instructor | 100% process eval. Pass rates. | Emphasize to instructors in faculty meetings the importance of completing process evaluations for each student in their bay. |
| | Students successfully pass Ethics and Jurisprudence course | Course Assignments, tests and final grade | 100% of students will pass course with grade of "C" or higher | End of Winter term 1 st yr. | Course Instructor | Course Instructor | 100% Course Pass rate | Continue to add emerging information |
| | Graduates successfully pass State E&J Exam | State Exam Pass Rate | 100% of students pass | At time of application for licensure | Program Director | Program Director | 100% pass rate | Continue student preparation prior to graduation. |

| DH Degree Outcomes | Communication | Community & Environmental Responsibility | Critical Thinking & Problem Solving | Cultural Awareness | Professional Competence | Self-Reflection |
|---|---------------|--|-------------------------------------|--------------------|-------------------------|-----------------|
| Enhance knowledge as a life-long learner in healthcare by seeking peer support in professional associations, fulfilling continuing education and exploring career and educational advancements | ✓ | ✓ | | | ✓ | ✓ |
| Advocate for oral health and overall health for patients/communities by linking them with the appropriate resources and human services for individual needs and practice ethically within the scope of practice for dental hygienists as regulated by the State Dental Licensing Board. | ✓ | ✓ | | ✓ | ✓ | ✓ |
| Fulfill characteristics of a desired employee by demonstrating skills, teamwork, collaboration, respect, efficiency, and customer/patient service. | ✓ | | ✓ | ✓ | ✓ | |
| Examine and self assess one's own academic skill, professional competence and personal beliefs as they impact self and others to grow personally and professionally. | | ✓ | ✓ | | ✓ | ✓ |

| DH Degree Outcomes | DH 201 | DH 204 | DH 208 | DH 210 | DH 229 | DH 260 | DH 202 | DH 205 | DH 250 | DH 252 | DH 261 | DH 203 | DH 206 | DH 253 | DH 232 |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Enhance knowledge as a life-long learner in healthcare by seeking peer support in professional associations, fulfilling continuing education and exploring career and educational advancements ----- | H | H | H | | | L | H | H | M | H | H | H | H | H | M |
| PCC CO: Professional Competency | H | H | H | | | L | H | H | M | H | H | H | H | H | M |
| Advocate for oral health and overall health for patients/communities by linking them with the appropriate resources and human services for individual needs and practice ethically within the scope of practice for dental hygienists as regulated by the State Dental Licensing Board. ----- | H | H | H | M | M | | H | H | H | H | H | H | H | H | L |
| PCC CO: Community and Environmental Responsibility | H | H | H | M | M | | H | H | H | H | H | H | H | H | L |
| Fulfill characteristics of a desired employee by demonstrating skills, teamwork, collaboration, respect, efficiency, and customer/patient service. ----- | H | H | H | L | M | | H | H | L | H | H | H | H | H | M |
| PCC CO: Professional Responsibility | H | H | H | L | M | | H | H | L | H | H | H | H | H | M |
| Examine and self assess one's own academic skill, professional competence and personal beliefs as they impact self and others to grow personally and professionally. ----- | H | H | H | M | L | | H | H | M | M | H | H | H | H | M |
| PCC CO: Self-Reflection | H | H | H | M | L | | H | H | M | M | H | H | H | H | M |

EXHIBIT 1-C

Basic Academic Skill Competencies and Accompanying Table of Alignment with Outcomes

PCC DH Basic Academic Competencies:

Following all state/federal laws and regulations the DH Student will:

1. model professional behaviors, ethics, cultural awareness and respect while assuming responsibility for patient/community care either practicing alone or as a member of a healthcare team;
2. promote oral and general health to individuals and groups;
3. communicate effectively, both verbally and in writing, with individuals/groups;
4. assess the oral health needs of an individual or community, determine the availability of resources/services and facilitate access to oral health services;
5. systematically collect, analyze and record diagnostic data during patient assessment through the use of measures that determine general, oral and psychosocial health status;
6. recognize health conditions and medications that impact overall patient care, oral health education and the patient's ability to maintain their oral health, and manage medical emergencies that occur in the clinical setting;
7. utilize critical decision making skills to establish a dental hygiene diagnosis that is based on assessment data.
8. collaborate with the patient and/or health professionals to formulate a dental hygiene care plan that is patient-centered, individualized and addresses risk factors.
9. utilize science/evidence based research and accepted standards of practice while performing clinical supportive treatment including educational, preventative and therapeutic services designed to achieve and maintain oral health.
10. evaluate the effectiveness of the implemented educational, preventative and therapeutic services and modify as needed.
11. provide accurate, consistent and complete documentation for the dental hygiene process of care, referrals and follow-up care.
12. practice self- assessment for life-long learning, professional growth and promotion of the profession.

How Students Have Met Basic Academic Skill Competencies and Degree Outcomes
DH Program Course and Skill Competency Alignment with Program Degree and PCC Core Outcomes

| Course Taught | Skill Competency Assessed | Skill Level | Assessed By | Achievement Level | Results | Degree Outcome Has Been Met | PCC Core Outcome Has Been Met |
|----------------------|----------------------------------|--------------------|--|---|----------------|------------------------------------|--------------------------------------|
| DH 101 | #'s 1,2,3,4,5,6,7,8,9,10,11,12 | Introductory | Presentations, assignments, journals, research, attendance, quizzes, final | 75% or better | 100% pass rate | | |
| DH 104 | #'s 1,2,3,4,5,6,7,8,9,10,11,12 | Introductory | Clinic Objectives, assignments, attendance | Pass/No Pass | | | |
| DH 113/113L | #'s 3, 12 | Introductory | Weekly quizzes, assignments, final exam | 70% or better, lecture 75% or better lab. | | | |
| DH 121 | #'s 1,2,3,5,6,7,8,9,10,11 | Introductory | Written Exam, Role Playing, Case Study Presentation. | 75% or better | | | |
| DH 228 | #'s 3,5,7,9 | Introductory | Weekly Quizzes, Midterm, Final exam | 70% or better | | | |
| | | | | | | | |
| DH 102 | #'s 1,2,3,4,5,6,7,8,9,10,11,12 | Developing | Presentations, assignments, journals, research paper, attendance, quizzes, final | 75% or better | 100% pass rate | | |
| DH 105 | #'s 1,2,3,4,5,6,7,8,9,10,11,12 | Developing | Clinic Objectives, assignments, attendance, clinic test case | 75% or better, no "I's" (final grade weighted process 60%, product, 30%, Attend. 10%) | | | |
| DH 127 | #'s 6, 12 | Developing | Weekly Quizzes and Final | 70% or better | | | |
| DH 128 | #'s 3,5,7 | Introductory | Weekly Quizzes and Final | 70% or better | | | |
| DH 230 | #'s 1,3,4,6,7,8,9,10,12 | Developing | Online Discussions, Quizzes, Lab Projects, Final Exam | 70% or better | | | |
| DH 236 | #'s 1,3,11,12 | Developing | Research Assignment, Midterm, Final | 75% or better | | | |
| | | | | | | | |
| DH 103 | #'s 1,2,3,4,5,6,7,8,9,10,11,12 | Developing | Presentations, assignments, journals, research paper, table clinic, attendance, quizzes, final | 75% or better | 100% Pass Rate | | |
| DH 106 | #'s 1,2,3,4,5,6,7,8,9,10,11,12 | Developing | Clinic Objectives, assignments, attendance, clinic test case | 75% or better, no "I's" (final grade weighted process 50%, product, 40%, Attend. 10%) | | | |
| DH 109/109L | #'s 1,3,5,6,7,8,9,11,12 | Introductory | Quizzes, Final / DXTR Films, Rad. Interpretation, Assignments, Lab final | 70% or better | | | |

| Course Taught | Skill Competency Assessed | Skill Level | Assessed By | Achievement Level | Results | Degree Outcome Has Been Met | PCC Core Outcome Has Been Met | |
|---------------|---------------------------------|----------------------------|--|---|----------------|-----------------------------|-------------------------------|--|
| DH 129 | #'s 6, 12 | Developing | Weekly Quizzes and Final | 70% or better | | | | |
| DH 246 | #'s 2,3,5,6,8,11, 12 | Developing | Research Assignment, quizzes, Comprehensive Final | 70% or better | | | | |
| | | | | | | | | |
| DH 201 | #'s 1,2,3,4,5,6, 7,8,9,10,12 | Developing | Assignments, journals, attendance, quizzes, final exam | 75% or better | 100% Pass Rate | | | |
| DH 204 | #'s 1,2,3,4,5,6, 7,8,9,10,11,12 | Developing | DH Process of Care, Clinic Objectives, attendance, intro to perio mgmt, clinic test case | 75% on Radiographs 75% or better, no l's on clinic pts. (final grade weighted process 40%, product, 40%, Attend. 10%, Radiology10%) | | | | |
| DH 208 | #'s 1,2,3,4,5,7,9 | Introductory | Quizzes, web-site reading and activities, group activities, final exam, attend ODHA session. | 75% or better | | | | |
| DH 210 | #'s 1,3,4,5,6, 7,8,9,11,12 | Developing | Radiograph skill tests, Final Exam Rad Interpretation/Pathology Reviews Patient Referral for tx. | 75% on Product, No "l's on Process | | ✓ in DH 206 | ✓ in DH 206 | |
| DH 229 | #'s 3,5,6,10,11 8,9, | Introductory Developing | Written Exams Clinical Skill Tests – DH 204 Intro DH 205 Developing DH 206 Competent | 75% or better | | | | |
| DH 260 | #'s 1,2,3,5,6, 7,8,9,10 11,12 | Developing | Quizzes, Final Clinical Process Evaluations | 75% or better | | | | |
| | | | | | | | | |
| DH 202 | #'s 1,2,3,4,5,6, 7,8,9,10,12 | Developing | Presentations, individual assignments, group assignments, journals, attendance, quizzes, case study | 75% or better | | | | |
| DH 205 | #'s 1,2,3,4,5,6, 7,8,9,10,11,12 | Developing | DH Process of Care, Clinic Objectives, attendance, perio pt. mgmt, clinic test case | 80% on Radiographs 75% or better, no l's on clinic pts. (final grade weighted process 20%, product, 30%, Attend. 10%, Radiology10%, Exp. Func 10%, | | | | |

EXHIBIT 3-C2
Advisory Committee Members and Professional Supporters

2006-Present

2007/2008

| Advisory Committee Member | Affiliation | Professional Presenter/Mentor | Affiliation |
|--|-------------------------------------|--------------------------------------|-----------------------------------|
| Gary Allen, Dentist | Willamette Dental | Brent Pederson | Burkhart Dental |
| Wiley Gibson, 2 nd yr Student | Student Class Representative | Mary Ann Haisch, RDH | Proctor and Gamble |
| Weston Heringer, Pediatric Dentist | OHSU, ODA, MTI, Community Rotations | Katie Merideth, RDH | Graduate/private practice |
| Laurie Johnson, RDH | ODHA President | Ronel Cordova | a-dec |
| Monica Lyster, RDH | VA Hospital | Martha McDonald | Orascoptic |
| Virginia Mattfeld, RDH | Private Practice Hygienist | Chris Freshwater | Heine |
| Audrey Milan, 1 st yr Student | Student Class Representative | Penny Massengill | Sheer Vision |
| Amy Potter | Head Start/Community Member | Shawn Howell | PeriOptix |
| Jeff Reece | Burkhart Dental Supply | Sandie Miles, RDH | ADHA, Smoking Cessation |
| Denice Stewart, Dentist | OHSU | Physical Therapy Students | Pacific University |
| Michelle Turner, RDH | Private Practice, MTI | Jeffrey Sulitzer | Regence Blue Cross/ Blue Shield |
| Rosemary Toedtemeier, RDH | Russell Street HIV Clinic | Anthony Bouneff, DMD | Beaverton Oral Surgeons, Implants |
| | | Rick Snook | Nobel Biocare, Implants |
| | | Dr. David Rosenstein | Russell Street HIV Dental Clinic |

| | | | |
|--|--|-----------------------------------|---|
| | | Beth Finnon, RDH, MPH | Chemawa Reservation, Indian Health Service Dental Coordinator and Officer Public Health Service |
| | | Diane Hardiman, RDH | Multnomah County Dental Health Programs, PANDA Speaker |
| | | Dr. Paul Kleinstub | Dental Director & Chief Investigator, Oregon Board of Dentistry |
| | | Patrick Braatz & Teresa Haynes | Executive Director & Licensing Manager, Oregon Board of Dentistry |
| | | Kathleen Kuba | Student Employment /Co-op. Ed. |
| | | Lisa Copeland, RDH | Philips Sonicare |
| | | Patricia Gates, RDH | ODHA Vice President and Student Liaison |
| | | Peter Jacobsen, | Summit Presentations/Burkhart Dental Pharmacology CE Course |
| | | Dr. Chavez and Dr. Williams | Private practice dentists who performed mock interviews with students |
| | | Dr. April Love | Healthy Smiles Coalition, Community Water Fluoridation |
| | | Paul Cosgrove, LLP | ODHA Lobbyist, Government Relations Council |
| | | Mickey Nearhood, RDH | Independent Contracting in Dental Hygiene |

Restorative Curriculum

Winter 09

| Course | Costs | Amount | # students enrolled | Tuition Income | Clinic Income | Total Income | Cost Difference to PCC |
|------------------------|------------|------------|---------------------|----------------|---------------|--------------|------------------------|
| Cariology Course(1crL) | | | | | | | |
| 1 instr x 11 hrs | Instructor | 719 | 20 | 1,480 | 0 | 1,480 | |
| | Supplies | 0 | | | | | |
| Total | | 719 | | 1,480 | | 1,480 | 761 |

Spring 09

| | | | | | | | |
|-----------------------|------------|--------------|----|--------------|---|--------------|---------------|
| Intro to RSD(1L/1Lab) | | | | | | | |
| 1 instr x 11 hrs | Instructor | 719 | 20 | 2,960 | 0 | 2,960 | |
| 2 instr. x30 lab hrs. | | 2,903 | | | | | |
| | Supplies | 1,656 | | | | | |
| Total | | 5,278 | | 2,960 | | 2,960 | -2,318 |

Summer 09

| | | | | | | | |
|--------------------|------------|---------------|----|---------------|----------|---------------|----------------|
| RSD I (2L/2Lab) | | | | | | | |
| 1 instr x 22 hours | Instructor | 1,439 | 20 | 5,920 | | | |
| 4 instr x 60 hours | | 11,614 | | | | | |
| | Equip* | 6,466 | | | | | |
| | Supplies | 1,656 | | | | | |
| RSD II (2L/2Lab) | | | | | | | |
| 1 instr x 22 hours | Instructor | 1,439 | 20 | 5,920 | | | |
| 4 instr x 60 hours | | 11,614 | | | | | |
| | Supplies | 1,656 | | | | | |
| Total | | 35,884 | | 11,840 | 0 | 11,840 | -24,044 |

Fall 09

| | | | | | | | |
|----------------------|-------------|--------------|----|--------------|--------------|--------------|-------------|
| RSD III (1cr Clinic) | | | | | | | |
| 4 Instr x 30 hrs | Instructors | 5,807 | 20 | 1,480 | 5,000 | | |
| | Supplies | 1,656 | | | | | |
| Total | | 7,463 | | 1,480 | 5,000 | 6,480 | -983 |

Winter '10

| | | | | | | | |
|------------------------|-------------|--------------|----|--------------|--------------|--------------|-------------|
| RSD IV (1cr. Clinic) | | | | | | | |
| 4 Instr x 30 hrs | Instructors | 5,807 | 20 | 1,480 | 5,000 | 6,480 | |
| | Supplies | 1,656 | | | | | |
| Cariology Course(1crL) | | | | | | | |
| 1 instr x 11 hrs | Instructor | 719 | 20 | 1,480 | 0 | 1,480 | |
| Total | | 8,182 | | 5,920 | 5,000 | 7,960 | -222 |

Spring '10

| | | | | | | | |
|-----------------------|-------------|---------------|----|--------------|--------------|--------------|---------------|
| RSD V (1cr. Clinic) | | | | | | | |
| 4 Instr x 30 hrs | Instructors | 5,807 | 20 | 1,480 | 5,000 | 6,480 | |
| | Supplies | 1,656 | | | | | |
| Intro to RSD(1L/1Lab) | | | | | | | |
| 1 instr x 11 hrs | Instructor | 719 | 20 | 2,960 | 0 | 2,960 | |
| 2 instr. x30 lab hrs. | | 2,903 | | | | | |
| | Supplies | 1,656 | | | | | |
| Total | | 12,741 | | 4,440 | 5,000 | 9,440 | -3,301 |

| | | | | | | | |
|-------------------------------|--|---------------|---------------------|---------------|---------------|---------------|----------------|
| Total Costs of Program | | 70,267 | Total Income | 28,120 | 15,000 | 43,120 | -27,147 |
|-------------------------------|--|---------------|---------------------|---------------|---------------|---------------|----------------|

Future Yrs. reduced to - \$16,545

Notes:

Retrofitting of Clinic to accommodate Restorative - 18,335 pd for 6/07 by Perkins Grant
 Equip* cost is for Handpieces. Full cost is really \$12,931. A-dec to pay for 1/2 leaving PCC cost approx 6,466.
 Future years cost for handpiece maintenance/replacement estimated at \$800 yearly
 Future years cost for Supplies estimated at \$5,000 yearly
 If CE course is offered to private practice DH's and DH's, Irene G.'s program would use DH facilities/pay rent? Other factors???

Additional costs to students for instrument kits and supplies used in program (Tuition = 1,036 Supplies/instruments =\$2052)
 Total Program costs to students for the 2 years would increase from approx. \$15,500 - 18,600

FTE Generated = 12FTE (approx gain from each FTE \$2,100 to \$2,500)