

**Dental Laboratory Technology
Annual Report for Assessment of Outcomes
(For Degree, Certificate or Core Outcomes)**

1. Describe changes that have been implemented towards improving student's attainment of outcomes that resulted from outcome assessments carried out in the previous academic year:

Specifically referring to the CAD/CAM project for second year students -

- A. Project is nearing completion. Completion date is dependent on outside commercial dental laboratory sources. (para. 1C below).
 - B. First project was completed by second year students, as projected.
 - C. Second project could not be completed. It was determined either more expensive tool, or materials would be required for use with the available machinery at the commercial dental lab. This part of the project is being held, until said tools/materials can be obtained.
 - D. Presentation, student requirement and grading was adjusted to include the first part of the project. These will be adjusted further when the needed tools/materials are in place.
2. Identify the outcomes assessed this year and describe the methods used -

Demonstrate basic dental laboratory techniques in the design and fabrication of complete dentures, crowns and bridges, ceramic, and basic orthodontic appliances -

- A. Eighteen first year and twenty second year students were evaluated and grade sheets compiled. With few exceptions all students satisfactorily completed the assigned projects.
- B. Exceptions to para. 2A above were given additional one-on-one time with the instructors. All but one successfully completed the assigned project.
- C. Two of the above exceptions were due to insufficient command of English. One of those did get finished after the one-on-one intervention. The other exception could not complete the quarter's project and failed the course.
- D. Instructors concerns about the low level of English comprehension by students who have successfully completed several courses in ESL/ENNL will be presented to that department. There are always misunderstandings with non-native English speaking students, as should be expected. The difference here is that we've had two students in the last two years who have had no comprehension of the most basic words. This after having successfully completed several ESL/ENNL courses and pronounced eligible to proceed into college level courses.

Annual Report for DLT Assessment of Outcomes (cont'd)

Demonstrate advanced skills in more complex complete denture and fixed metal to porcelain prostheses -

- A. Grade sheets were compiled and perused for common weaknesses in the grade sheet design or fabrication procedures presentations.
- B. No teaching/grading problems could be discerned.
- C. Problems discovered were caused by a few individual students failing to read their procedure notes and/or the heed the instructor's directions, thereby resulting in the degradation of the appliance.

Apply basic knowledge of the physics and chemistry of dental materials to insure the proper materials are used in the correct proportions for specific dental laboratory procedures and that correct safety and disposal procedures are followed -

- A. Graded projects and written exams were checked.
- B. All students met the required standards.

Engage correct verbal, non-verbal and written communications in the dental laboratory and dental profession as both a technician and team leader -

- A. Students are furnished with dentists prescriptions (work orders) for specific cases.
- B. All students with few exceptions were successful at the first attempt.
- C. The remaining students, except the one mentioned in para. 2C earlier, were successful after a short one-on-one consultation.

Function in a non-biased manner as a member of a diverse dental team or community -

- A. All students are required to interact with one another and the instructors in lectures and labs.
- B. Instructors and lab assistants pay very close attention to the melding of each class into a functioning, cohesive unit.
- C. No discernable biases have occurred in any of the classes in our experience.
- D. Instructors and lab assistants will continue to monitor for biases that may impede the progress of the class.

Annual Report for DLT Assessment of Outcomes (cont'd)

Design a Dental Laboratory Business Plan, invoicing system, ledger and the correct tax forms utilizing available computer software/skills -

- A. This course is taught by an out-of-department instructor.
- B. Discussions with the students indicate they are very satisfied with the course content and presentation.
- C. The instructor indicates satisfactory progress of the students.
- D. Instructor maintains currency of the course as tax laws change.

Be prepared to continue dental, community and world awareness through conventions, lecture attendance and active participation in professional/non-professional organizations -

- A. Students are encouraged (they cannot be required) to attend both the Oregon Dental Association held annually in Portland and the Annual Oregon Association of Dental Laboratories convention held in Oregon. Attendance has been satisfactory at these conventions.
- B. Assessments revealed 10% of first year students and approximately 20% of second year students voluntarily participated in the OR-MOM (Mission of Mercy) Annual Dental Conference of Dental Professionals meeting.
- C. The DT285 lecture incorporates different types of dental labs, dental specialties and guest lecturers. Course has received very favorable remarks and results from the students. This course continues to evolve with the addition and changes to the field.

Apply legal and ethical principles to the dental environment -

- A. Legal and ethical matters are emphasized throughout all the lectures and labs.
- B. One hour of lecture time is directly oriented to ethics and the laws governing the industry.
- C. All students meet the requirements of this assessment and there are no indications of the need of additional training in this area.

Be prepared to transfer to a college or university for upper level studies in the health fields:

- A. All students meet with a Health Admissions Advisor at the beginning of the first year and are informed of what the requirements are for our degree program.

Annual Report for DLT Assessment of Outcomes (cont'd)

- B. Even though a degree is not required for this course or work in the field, the instructors frequently mention the advantages of the degree track.

Demonstrate a deeper knowledge of business procedures pertinent to owning or managing a dental laboratory -

- A. Students are encouraged to visit dental labs and learn more about the business.
- B. Much anecdotal information is passed on to the students by the lecturers (who have owned their own dental labs) and guest lecturers.
- C. The DT275 and DT276 lecture/lab go deeply into managing/owning a dental laboratory.
- D. All students meet or exceed the standards set for this assessment.

3. **Identify any changes that should, as a result of this assessment, be implemented towards improving students' attainment of degree/certificate outcomes:**

- A. The CAD/CAM project assessment, described in para. 1 earlier will require adjustment as the tools and materials become available.
- B. In concert with the manufacturers of the CAD/CAM system and the PCC IT department, determine what hardware upgrades are needed to run the program in the PCC Dental Lab and then request the necessary funds to purchase the hardware.
- C. The ESL/ENNL student skills described in (para. 2) will require a closer alliance between the DLT and ESL/ENNL programs.
- D. As updates on new materials and procedures become available, the physical and chemical (para. 2) assessments will require updating.
- E. Require all Dental Department students and faculty attend and participate in the Oregon Mission of Mercy Combined Dental Conference Held in November 2011. This is a service learning project.