



Dental Hygiene Degree Completion Outreach 2015-16 Assessment Report

I. Introduction

The Oregon Tech Dental Hygiene program began in 1970 as an Associate of Applied Science (AAS) program. Beginning in 1985, students had the option to complete a Bachelor of Science (BS) degree and in 2003 the program began awarding the BS degree only. In 1996 a Bachelor of Science Degree Completion program was introduced. The degree completion program offers dental hygienists, who have earned an associate's degree, the opportunity to complete a Bachelor of Science Degree in Dental Hygiene.

All dental hygienists with an associate degree have at least three years of college because of prerequisite college courses needed before acceptance into a dental hygiene program. The degree completion program offers licensed dental hygienists the opportunity to complete their fourth year in order to earn a BS.

The degree is offered fully on-line with most courses offered three to four times a year. Students may begin any term, take one or several courses at a time, and take time off and re-enter the program as needed. Students are exposed to a variety of future career opportunities, including education, public health, and business.

The program enrollment for the past six years is presented in the table (Table 1) below.

TABLE 1: Enrollment BDHO					
2010	2011	2012	2013	2014	2015
69	80	73	72	57	72

II. Purpose, Objectives, and Student Learning Outcomes

Dental Hygiene Degree Completion Outreach

The purpose of the Bachelor's Degree Completion Outreach Program in Dental Hygiene program is to prepare the graduate for career opportunities outside clinical dental hygiene such as education, public health, and business management.

Program Educational Objective

The program prepares the student to achieve professional growth and development.

Student Learning Outcomes

The dental hygiene faculty met in September 2015 to discuss the upcoming assessment cycle. The program student learning outcomes (PSLOs) will remain the same. On an institutional level, Oregon Tech (OT) has transitioned from institutional student learning outcomes (ISLOs) to essential student learning outcomes (ESLOs). ESLOs reflect the common expectations about the

knowledge, skills, and abilities that OT students will acquire and are reflected in the General Education requirements that lay the foundation upon which the major curricula build.

Faculty determined that five out of the six ESLOs will be assessed in the students' general education courses. The remaining ESLO (#2) will be assessed in DH 455 – *Dental Hygiene Research* when Oregon Tech assesses in the 2017-18 cycle.

Essential Student Learning Outcomes (ESLO)

ESLO 1: Oregon Tech students will communicate effectively orally and in writing.

- SPE 321 – *Small Group and Team Communication*
- COM elective – most students take COM 205 – *Interpersonal Communication*

ESLO 2: Oregon Tech students will engage in a process of inquiry and analysis.

- DH 455 – *Dental Hygiene Research*

ESLO 3: Oregon Tech students will make and defend reasonable ethical judgments.

- DH 275 – *Dental Ethics* (Ethics is a required prerequisite course for degree-completion)
- BUS elective – some students will have ethics assessed in their business elective course.

ESLO 4: Oregon Tech students will collaborate effectively in teams or groups.

- SPE 321 – *Small Group and Team Communication*

ESLO 5: Oregon Tech students will demonstrate quantitative literacy.

- MATH 243 – *Statistics*

ESLO 6: Oregon Tech students will explore diverse perspectives.

- COM elective – most students take COM 205 – *Interpersonal Communication*

Program Student Learning Outcomes (PSLOs)

(Bold denotes courses in which assessments are implemented)

- 1.1 Analyze the strengths and limitations of different research designs and their impact on the dental hygiene profession. **(DH 455)**
- 1.2 Use evidence-based decision making to evaluate and incorporate emerging treatment modalities into dental hygiene practice. **(DH 455)**
- 1.3 Analyze your dental hygiene department to identify problems and areas where there is needed improvement; clarify the problem; and propose viable solutions **(DH 454)**
- 1.4 Identify current and emerging issues in the profession of dental hygiene. **(DH 401)**
- 1.5 Assess the oral health care needs of a community and plan a project to meet those needs. **(DH 470)**
- 1.6 Design instruction that includes teaching strategies and assessments to meet a variety of learning style needs. **(AHED 450)**

III. Assessment Cycle

The following table (Table 2) denotes the assessment cycle. Faculty adjusted the 3-year cycle to align PSLO 1.2 with ESLO 2.

PSLOs – every 3 years ESLOs – every 6 years	2014-15	2015-16	2016-17	2017-18	2016-17	2017-18
1.1 Analyze the strengths and limitations of different research designs and their impact on the dental hygiene profession ESLO 2: Inquiry and analysis				PSLO		
1.2 Use evidence-based decision making to evaluate and incorporate emerging treatment modalities into dental hygiene practice ESLO 2: Inquiry and analysis				PSLO ESLO		
1.3 Analyze your dental hygiene department to identify problems and areas where there is needed improvement; clarify the problem; and propose viable solutions.	PSLO		PSLO			PSLO
1.4 Identify current and emerging issues in the profession of dental hygiene	PSLO		PSLO			PSLO
1.5 Assess the oral health care needs of a community and plan a project to meet those needs.		PSLO			PSLO	
1.6 Design instruction that includes teaching strategies and assessments to meet a variety of learning style needs.		PSLO			PSLO	

IV. Summary of 2015-16 Assessment Activities

During the 2015-16 academic year the dental hygiene faculty assessed two program student learning outcomes, 1.5 and 1.6. No weaknesses were identified from 2014-15 that needed to be reassessed. The following table (Table 3) provides an overview of 2015-16 assessment activities.

<i>Student Learning Outcome</i>	<i>Criteria</i>	<i>Assessment Method</i>
PSLO 1.5 Assess the oral health care needs of a community and plan a project to meet those needs.	<ul style="list-style-type: none"> ▪ Form a committee and choose a target population ▪ Choose appropriate tools for assessment of oral health ▪ Analyze and prioritize data ▪ Write measureable goals, objectives and strategies 	<u>Direct Assessment</u> <ul style="list-style-type: none"> ▪ Rubric <u>Indirect Assessment</u> <ul style="list-style-type: none"> ▪ Exit survey

	<ul style="list-style-type: none"> ▪ Develop a timeline for activities ▪ Write a supplies list, budget and funding plan ▪ Write plans for formative and summative evaluations to be completed in DH 471 	
PSLO 1.6 Design instruction that includes teaching strategies and assessments to meet a variety of learning style needs.	<ul style="list-style-type: none"> ▪ Design instruction that meets a variety of learning style needs ▪ Create active teaching strategies ▪ Develop traditional and non-traditional assessments 	<u>Direct Assessment</u> <ul style="list-style-type: none"> ▪ 4 MAT Lesson Plan project <u>Indirect Assessment</u> <ul style="list-style-type: none"> ▪ Exit survey
Assessment Points: DH 470 Community Program Planning I (Fall term); AHED 450 Instructional Methods (Fall term); Exit Survey (Fall and Winter term)		

PSLO 1.5: Assess the oral health care needs of a community and plan a project to meet those needs. **(DH 470)**

Direct Assessment: Rubric-scored assignment

BDHO students' ability to assess the oral health care needs of a community and plan a project to meet those needs was assessed in DH 470 Fall 2015 term. Students were assigned a project in which they chose a target population, assessed the needs of the population, analyzed and prioritized data, developed goals and objectives, and created strategies to meet the oral health needs of the community.

The following table (Table 4) summarizes the results of the assessment.

TABLE 4				
Performance Criteria	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Overall Results
Form a committee and choose a target population	Rubric-scored assignment	1-4 proficiency scale according to rubric	80% achieve proficiency of 2 or higher	100%
Choose appropriate tools for assessment of oral health	Rubric-scored assignment	1-4 proficiency scale according to rubric	80% achieve proficiency of 2 or higher	100%
Analyze and prioritize data	Rubric-scored assignment	1-4 proficiency scale according to rubric	80% achieve proficiency of 2 or higher	100%
Write measurable goals, objectives and strategies	Rubric-scored assignment	1-4 proficiency scale according to rubric	80% achieve proficiency of 2 or higher	100%
Develop a timeline for activities	Rubric-scored assignment	1-4 proficiency scale according to rubric	80% achieve proficiency of 2 or higher	100%

Write a supplies list, budget and funding plan	Rubric-scored assignment	1-4 proficiency scale according to rubric	80% achieve proficiency of 2 or higher	100%
Write plans for formative and summative evaluations to be completed in DH 471	Rubric-scored assignment	1-4 proficiency scale according to rubric	80% achieve proficiency of 2 or higher	100%

Table 4 Assessment Results for PSLO 1.5 in DH 470, Fall term (2015)

Strengths: Students receive timely feedback and are given the opportunity to make improvements as they progress with their projects. The Planning Manual guides them through a step by step process with formats and examples for their submissions. Several students are continuing with community projects after the course.

Weaknesses: None observed.

Plan for Improvement: Addition of a lecture on public health overall and asking students to refer to their own state regulations for community service guidelines as they vary from state to state.

Indirect Assessment: Exit Survey

BDHO students' ability to assess the oral health care needs of a community was assessed in the graduate exit survey fall and winter terms. On the survey students checked no/limited proficiency, some proficiency, proficiency, or high proficiency to the following question:

Q #1: The Oregon Tech Dental Hygiene Bachelor Degree Completion Program has prepared me to achieve the following learning outcome:

Assess the oral health care needs of a community and plan a project to meet those needs.

The following table (Table 5) summarizes the results of the assessment.

TABLE 5			
Assessment Method	Measurement Scale	Minimum Acceptable Performance	Overall Results
Exit Survey	1-4 proficiency scale	80% achieve proficiency of 2 or higher	100%

Table 5 Assessment Results for PSLO 1.5 in Exit Survey Fall term (2015) and Winter term (2016)

Strengths: The same strengths identified above under Table 4 for the direct assessment are the same for the indirect assessment.

Weaknesses: None

Plan for Improvement: Continue successful teaching and learning strategies. Next year the assessment report will include responses from graduates through the four-term cycle.

PSLO 1.6: Design instruction that includes teaching strategies and assessments to meet a variety of learning style needs.

Direct Assessment: Rubric-scored assignment

BDHO students' ability to design instruction that includes teaching strategies and assessments to meet a variety of learning style needs was assessed in AHED 450 fall term. Students were assigned a term project in which they develop a complete lesson plan that included goals, objectives, teaching strategies to meet various learning style needs, traditional and alternative assessments, and a faculty evaluation.

The following table (Table 6) summarizes the results of the assessment.

TABLE 6				
Performance Criteria	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Overall Results
Design instruction that meets a variety of learning style needs	Rubric-scored assignment	0-4 proficiency scale according to rubric	80% achieve proficiency of 3 or higher	100%
Create active teaching strategies	Rubric-scored assignment	0-4 proficiency scale according to rubric	80% achieve proficiency of 3 or higher	100%
Develop traditional and non-traditional assessments	Rubric-scored assignment	0-4 proficiency scale according to rubric	80% achieve proficiency of 3 or higher	100%

Table 6 Assessment Results for PSLO 1.6 in AHED 450, Fall 2015

Strengths: All ten students earned maximum points for all three performance criteria. The course is designed with weekly assessments that continue to add the components needed for the final lesson plan project. Students receive feedback from the instructor as needed when developing the various components, which leads to excellent completed lesson plans. Students also have the opportunity to view past student work samples to help guide their learning and application to lesson plan building.

Weaknesses: None observed.

Plan for Improvement: None – students have an excellent understanding on how to develop lesson plans with multiple teaching strategies and types of assessments to meet the various learning style needs.

Indirect Assessment: Exit Survey

BDHO students' ability to design instruction that includes teaching strategies and assessments to meet a variety of learning style needs was assessed in the graduate exit survey fall and winter terms. On the survey students checked no/limited proficiency, some proficiency, proficiency, or high proficiency to the following question:

Q #1: The Oregon Tech Dental Hygiene Bachelor Degree Completion Program has prepared me to achieve the following learning outcome:

Design instruction that includes teaching strategies and assessments to meet a variety of learning style needs.

The following table (Table 7) summarizes the results of the assessment.

TABLE 7			
Assessment Method	Measurement Scale	Minimum Acceptable Performance	Overall Results
Exit Survey	1-4 proficiency scale	80% achieve proficiency of 2 or higher	100%

Table 7 Assessment Results for PSLO 1.4 in Exit Survey Fall term (2015) and Winter term (2016)

Strengths: The same strengths identified above under Table 6 for the direct assessment are the same for the indirect assessment.

Weaknesses: None

Plan for Improvement: None – continue successful teaching strategies.

Evidence of Student Learning

During the 2015-16 academic year, the BDHO program assessed the following student learning outcomes:

- PSLO 1.5: Assess the oral health care needs of a community and plan a project to meet those needs
- PSLO 1.6: Design instruction that includes teaching strategies and assessments to meet a variety of learning style needs

The faculty met in April 2016 to discuss results of the direct and indirect assessments. No weaknesses were identified in this assessment cycle except for the need to increase participation in the BDHO exit survey to increase validity of indirect assessments. Faculty were identifying students in their DH courses graduating at the end of the term in order to send an email invite requesting participation in the exit survey. Although we received 100% participation this method only targeted graduating students in the DH courses. Faculty can now generate reports that identify all BDHO students graduating each term, including their preferred email address. Beginning spring term 2016 we will send the exit survey link via email instead of through Blackboard in the DH courses.

V. Changes Resulting from Assessment

The faculty will meet at the beginning of the 2016-17 academic year to discuss changes to general education requirements and assessments at the institutional level, and the impact on how we assess ESLOs.

VI. Appendices

APPENDIX A: CURRICULUM MAPS

Program Student Learning Outcome 1.5: Assess the oral health care needs of a community and plan a project to meet those needs.

The following table (TABLE A1) indicates the BDHO dental hygiene curriculum. Courses that are bolded indicate that the PSLO above is taught in the course, students demonstrate skills or knowledge in the PSLO, and/or students receive feedback on their performance on the PSLO.

I = Introduced; R = Reinforced; E=Emphasized

Table A1: PSLO 1.5					
		Fall	Winter	Spring	Summer
AHED 450	Instructional Methods				
AHED 451	Instructional Experience				
AHED 452	Instructional Practicum				
AHED 460	Fundamentals of Distance Education				
DH 401	Overview of Advanced Dental Hygiene				
DH 453	Current issues in Dental Hygiene				
DH 454	Dental Practice Management				
DH 455	Dental Hygiene Research				
DH 470	Community Program Planning I	E	E	E	E
DH 471	Community Program Planning II	E	E	E	E
DH 480	Community Health Practicum				
BUS 317	Health Care Management				
BUS 331	Personal Finance				
MATH 243	Introductory Statistics				
SPE 321	Small Group and Team Communication				
	Communications Elective				
	Humanities Elective				
	Humanities Elective				
	Social Science Elective				
	Elective, approved by advisor				

Program Student Learning Outcome 1.6: Design instruction that includes teaching strategies and assessments to meet a variety of learning style needs

The following table (TABLE A2) indicates the BDHO dental hygiene curriculum. Courses that are bolded indicate that the PSLO above is taught in the course, students demonstrate skills or knowledge in the PSLO, and/or students receive feedback on their performance on the PSLO.

I = Introduced; R = Reinforced; E=Emphasized

Table A2: PSLO 1.6					
		Fall	Winter	Spring	Summer
AHED 450	Instructional Methods	E	E		E
AHED 451	Instructional Experience	R		R	
AHED 452	Instructional Practicum				
AHED 460	Fundamentals of Distance Education	R		R	
DH 401	Overview of Advanced Dental Hygiene				
DH 453	Current issues in Dental Hygiene				
DH 454	Dental Practice Management				
DH 455	Dental Hygiene Research				
DH 470	Community Program Planning				
DH 471	Community Program Planning II				
DH 480	Community Health Practicum				

Table A2: PSLO 1.6					
BUS 317	Health Care Management				
BUS 331	Personal Finance				
MATH 243	Introductory Statistics				
SPE 321	Small Group and Team Communication				
	Communications Elective				
	Humanities Elective				
	Humanities Elective				
	Social Science Elective				
	Elective, approved by advisor				

APPENDIX B: RUBRICS

PSLO 1.5 direct assessment

RUBRIC: Community Project Assignments				
Criteria	Proficient	Competent	Limited Proficiency	No Proficiency
<i>Committee & target population</i> (5pts)	Coordinates committee members, sets up first meeting, chooses possible target population(s)	Coordinates committee members, sets up first meeting, may have difficulty identifying population	Unable to coordinate committee members, set up meeting, or choose population	Unable to coordinate committee members and set up meeting; no population identified
<i>Minutes & identification of target populations</i> (10 pts)	Minutes are accurate and written using correct format; clear identification of target population	Minutes are accurate and written; target population lacks clarity	Minutes are written but may lack format or accuracy; identification of a target population is missing	Minutes are written but lack format and/or accuracy; identification of a target population is missing.
<i>Assessment plan & tools</i> (20 pts)	All tools submitted are appropriate to assess the target population's specific oral health needs; five issues are addressed	Some tools need minor revision to gather data specific to population; five issues are addressed	Assessment tools are surveys only and do not assess populations' s specific oral needs; five issue may not be addressed properly	Anecdotal or insufficient data gathered; does not reflect population's specific needs; five issues not assessed.
<i>Needs assessment completed, analyzed, and prioritized</i> (20 pts)	Correctly analyzes assessment data, prioritizes needs based on available resources and interests	Correctly analyzes assessment data, but does not consider some aspects when determining priorities	Assessment data incorrectly analyzed; does not consider resources and group interests	Data analyzed and prioritized to meet student's interest rather than the population's needs.
<i>Goals, objectives & strategies</i> (20 pts)	Accurate goals and measureable objectives; strategies written to address needs and	Goals, objectives, & strategies require minor adjustments	Goals & objectives are unclear and/or some may not be measured	Goals and objectives are poorly written; do not follow guidelines

	examples are provided			
Timeline (10 pts)	Timeline is complete and allows sufficient time to accomplish assignments	Timeline is complete but may be over/under estimated	Timeline is complete but represents insufficient time on task	Timeline is incomplete or is insufficient for task(s)
Supplies & Budget and funding plan (10 pts)	Funding is realistically estimated; funds needed and donations made are clearly stated; cites for possible funding located and submitted	Funding realistically estimated but format needs minor adjustments for clarity; cites for possible funding located and submitted	Funding estimated but format is confusing; donations and budgets items are unclear; no citation for possible funding	Budget is not reflective of actual prices or needs of project
Formative and summative evaluation plans (5 pts)	All formative evaluation questions answered and recommendations given; summative evaluation includes appropriate measurement of objectives	Some minor errors in evaluations	Major errors in evaluations	Evaluation methods not followed

PSLO 1.6 direct assessment

RUBRIC: 4 MAT Lesson Plan Project				
Criteria:	Proficient	Competent	Limited proficiency	No proficiency
Topic, Goal, and Intended Audience	Focused, achievable, and audience defined; Student instructor has very clear idea what students should achieve; Outcome is achievable and/or measurable	Topic too broad or not clearly defined; Student instructor has clear idea what students should achieve but outcome is too narrow or too broad	Topic not matched to needs of audience; Student instructor has some idea about lesson outcome but it is not achievable or measurable	Topic unclear and audience undefined Student is unclear about lesson outcome
Cognitive Objectives Required components include a condition, performance, and criterion	Objectives are clearly written and measurable; included at least 5; objectives include all 3 required components; objectives span Bloom's taxonomy	Clearly written; measurable; missing 1 or 2 required components; spans Bloom's taxonomy; 4 or less written objectives	Objectives lack clarity and are difficult to measure and/or missing required components and/or does not span Bloom's taxonomy; 3 or less written objectives	Required components are not present; unclear; do not follow logical progression of the taxonomy; 2 or less written objectives

<p>Psychomotor and/or Affective Objectives</p> <p>(Not all plans are conducive to having psychomotor objectives)</p>	Included at least 5 psychomotor and/or affective objectives; clearly written; contain required components	One or two objectives are not measurable or not clearly written; missing 1 or 2 required components	More than two objectives are not measurable or not clearly written; missing required components; 3 or less written objectives	Objectives are not measurable and not clearly written; missing required components; 2 or less written objectives
4MAT Activities	Lesson plan follows 4MAT order; obvious understanding of the type of activities that belong in each quadrant; includes Rt & Lt brain; activities & prior expectations reflect level of student learning	Lesson plan follows 4MAT order; understanding of the type of activities that belong in each quadrant; some activities does not reflect level of student learning	Lesson plan does not completely follow 4MAT order; some Rt & Lt brain activities confused; plan needs some improvement	Lesson plan is not logical and does not make sense; plan does not flow from quadrant to quadrant; unclear what will happen in practice
Creativity	Planned activities are 4MAT and audience appropriate; show creativity and thought; should create interest by students	Planned activities do not correspond to all 4 quadrants, need more creativity	Activities are fairly standard	Activities are dull, lack creativity
Teaching Strategies	Planned strategies to motivate students; used a variety of strategies including types that would incorporate active learning. All strategies directly relate to increasing student learning in relationship to learning objectives	Planned several teaching strategies; not all strategies correlate to learning objectives. Needed more types of strategies and/or active learning strategies	Only planned a few strategies and/or did not correlate strategies to learning objectives	Only used a couple of strategies and did not correlate strategies to learning objectives
<p>Planned Visual Aids & Handouts</p> <p>Must be included - can send as separate attachments</p>	Obvious planning so that visual aids/handouts add value to lesson. All visual aids are developed and are "presentation ready".	Planned visual aids need improvement and a bit more work to be presentation ready	Guidelines for creating visual aids are not followed; not well planned; needs significant work to be presentation ready	Visual aids not planned or are inappropriate
Student Assessment	Assessment methods included traditional and non-traditional activities. Measures how well students achieved objectives; clearly written and well developed.	Assessment methods included traditional and non-traditional activities. Measures how well students achieved objectives. Need a bit more clarity.	Assessments need more detail and/or not written clearly. Does not include both traditional and non-traditional assessments.	Assessments not well-developed and do not align with objectives.

Faculty Assessment	Included faculty assessment tool 2 = yes; 0 = no			
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APPENDIX C: EXIT SURVEY

Dental Hygiene Bachelor Degree Completion Exit Survey

1. The Oregon Tech Dental Hygiene Bachelor Degree Completion Program has prepared me to achieve the following learning outcomes:

	No/limited proficiency	Some proficiency	Proficiency	High Proficiency
Analyze the strengths and limitations of different research designs and their impact on the dental hygiene profession				
Use evidence-based decision making to evaluate and incorporate emerging treatment modalities into dental hygiene practice				
Analyze your dental hygiene department to identify problems and areas where there is needed improvement; clarify the problem; and propose viable solutions				
Identify current and emerging issues in the profession of dental hygiene				
Assess the oral health care needs of a community and plan a project that meets those needs				
Design instruction that includes teaching strategies and assessments to meet a variety of learning style needs				

One of the “Essential Student Learning Outcomes” at Oregon Tech is that students will engage in a process of inquiry and analysis.

Definition: Inquiry and analysis consists of posing meaningful questions about situations and systems, gathering and evaluating relevant evidence, and articulating how that

evidence justifies decisions and contributes to students' understanding of how the world works.

2. As a result of my Oregon Tech education I would rate my proficiency in as follows:

	No/limited proficiency	Some proficiency	Proficiency	High Proficiency
"Inquiry and Analysis"				

Note: Oregon Tech assesses this on a 6-year cycle; will add to report 2017-18 report

3. What was your goal for completing a bachelor degree?

- Entry into a master's degree program
- Preparation for a career in administration management
- Preparation for a career in education
- Preparation for a career in public health
- Personal enrichment
- Other (please specify)

4. Do you feel you achieved this goal?

- Yes
- No
- Comments: _____

5. Are you planning on pursuing a master's degree? If so, in which field?

- Not planning on pursuing a master's degree
- Advanced dental hygiene
- Education
- Management
- Public Health
- Other (please specify) _____

6. Reflecting on your time as a student in the Dental Hygiene Bachelor Degree Completion program, what are the strongest aspects about the degree (could be experiences, courses, professors, general characteristics, or features of the program)?

7. What are the weakest aspects about the major (could be experiences, courses, professors, general characteristics, or features of the program)?

8. What suggestions do you have for improvement?

9. Any other comments: