

Oregon Institute of Technology

Bachelor of Science – Dental Hygiene

I Introduction

The OIT 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. All students must complete prerequisite courses to be eligible for application to the program. Acceptance to the program is selective and limited to no more than 27 students per year.

The five year retention and graduation rate for 1999-2001 cohorts is 100%. According to the 2006 Graduate Survey, graduates are earning between \$38,400 and \$76,000 per year with the mean being \$58,783 per year.

II Purpose, Objectives, and Student Learning Outcomes

The department met fall term 2007 to finalize the purpose, objectives, and student learning outcomes. The department utilized feedback from OIT administration, American Dental Association Commission on Dental Accreditation standards, and American Association of Dental Schools (AADS), Section on Dental Hygiene Education Competency Development Committee competency statements to draft the following:

The purpose of the Bachelor of Science in Dental Hygiene program is to prepare students for entry into the dental hygiene profession and additional careers such as public health, research, and marketing. The graduate will be prepared for entry into master degree programs in dental hygiene and related programs.

The following describes the objectives of the B.S. program in Dental Hygiene:

1. Provide the dental hygiene student the opportunity to gain the necessary knowledge, skills, and values to enter the registered practice of dental hygiene
2. Prepare the student to sit for the National Board Dental Hygiene Examination
3. Prepare the student to take the WREB examination in dental hygiene, anesthesia, and restorative.

The following are the student learning outcomes for the Bachelor of Science Degree in Dental Hygiene:

1. The graduate will be competent in providing skilled care using the highest professional knowledge, judgment, and ability.
2. The graduate will be competent in health promotion and disease prevention.
3. The graduate will be competent in assessing, planning, implementing and evaluating community-based oral health programs including health promotion and disease prevention activities.
4. The graduate will be competent in providing patient care.
5. The graduate will value professional growth and development.

The program also offers students experiential learning opportunities including:

- Membership in the Student American Dental Hygienists' Association (SADHA) and representation at state and national levels
- Professional meetings: Oregon Dental Conference and Oregon Dental Hygienists' House of Delegates Meeting

- Assessment, implementation, and evaluation of community health projects
- International trips to provide dental hygiene care to persons in third world countries
- Off campus experience: school-based screenings and presentations, health fairs, and dental clinics/offices.

III Assessment Cycle

Student learning outcomes will be assessed every three years. The following is the three-year cycle:

Bachelor of Science in Dental Hygiene						
Outcome	07-08	08-09	10-11	11-12	12-13	13-14
1. The dental hygiene graduate will be prepared with the foundation that is central to all roles of the dental hygienist.		X			X	
2. The dental hygiene graduate will be competent in health promotion and disease prevention			X	X		X
3. The dental hygiene graduate will be prepared to be involved in the community.		X			X	
4. The dental hygiene graduate will be competent in patient care.	X			X		
5. The dental hygiene graduate will value professional growth and development			X			X

IV Assessment Activities:

Outcome #4 was assessed during the 2007-2008 academic year in courses DH223 Dental Hygiene Clinical Practice and Seminar III, DH321-323 Dental Hygiene Clinical Practice and Seminar IV-VI and DH421-423 Dental Hygiene Clinical Practice and Seminar VII-IX. (See curriculum map page 8). Seven performance criteria were evaluated using Dental Hygiene Student Tracking (DHST), chart audits, mock board examinations, the WREB examination, and the graduate exit survey.

Student performance is tracked using an electronic system. This year the program selected Dental Hygiene Student Tracking (DHST) which is supported by the Typhon group. The program was piloted in winter term with second year students (class of 2009). It was fully implemented spring term with first year and second year students, class of 2010 and 2009 respectively. (See Appendix pp 9-18)

The chart audit instrument consists of 26 items in 5 categories, (1) assessment, (2) dental exam, (3) informed consent, (4) dental hygiene services, and (5) prevention. Chart audits were performed by students winter and spring terms as a class activity. (See Appendix pp 19-21)

A mock board exam designed to replicate the WREB for Dental Hygiene was administered to senior level students in their 7th and 8th terms. The assessment evaluated the following areas:

- Probe/Recession (15 points)
- EO/IO (10 points)
- Calculus/Tissue Trauma (75 points)
- Penalties

(See Appendix pp 22-23)

Most students take the WREB examination. WREB examinations were developed to provide reliable clinical assessments for state licensing agencies to use in making valid licensing decisions. WREB examination results are accepted by dental and dental hygiene licensing agencies in more than 30 states.

WREB examinations have been developed, administered, and reviewed in accordance with applicable guidelines from the American Dental Association, the American Association of Dental Examiners, the American Psychological Association, the National Council on Measurement in Education, and the American Educational Research Association. In 2005, the WREB examination programs were successfully validated, according to national testing standards, by a testing expert who is external to WREB.¹

The graduate exit survey consists of questions in 4 categories (1) general education, (2) transferable skills, (3) student learning outcomes, and (4) dental hygiene competencies and three open-ended questions. Graduating seniors (Class of 2008) completed the exit survey. Fourteen out of twenty-four surveys were returned. (See Appendix pp 24-28)

Table: Student Learning Outcome #4, Evaluation Criteria and Assessment Methods.

Learning Outcome #4 The dental hygiene graduate will be competent in patient care.	
Criteria The graduate will be able to:	Assessment Method
1. Systematically collect, analyze, and record data on the general, oral, and psychosocial health status of a variety of patients using methods consistent with medico-legal principles	<ul style="list-style-type: none"> • Chart audit • Student tracking • Graduate exit survey
2. Use critical decision making skills to reach conclusions about the patient’s dental hygiene needs based on all available assessment data	<ul style="list-style-type: none"> • Student tracking • Graduate exit survey
3. Collaborate with the patient and/or other health professionals to formulate a comprehensive dental hygiene care plan that is patient-centered and based on current scientific evidence	<ul style="list-style-type: none"> • Chart audit • Graduate exit survey
4. Provide specialized treatment that includes preventive and therapeutic services designed to achieve and maintain oral health	<ul style="list-style-type: none"> • Chart audit • Mock boards • WREB • Graduate exit survey
5. Evaluate the effectiveness of the implemented clinical, preventive, and educational services and modify as needed	<ul style="list-style-type: none"> • Chart audit
6. Provide dental hygiene care for the child, adolescent, adult, and geriatric patient	<ul style="list-style-type: none"> • Student tracking • Graduate exit survey
7. Provide dental hygiene care for all types of classifications of periodontal disease.	<ul style="list-style-type: none"> • Student tracking • Graduate exit survey

¹ WREB. Retrieved May 23, 2008 from: <http://www.wreb.org/>

Assessment Results

Criterion 4.1: Systematically collect, analyze, and record data on the general, oral, and psychosocial health status of a variety of patients using methods consistent with medico-legal principles

Assessment: Chart Audit

Items 1-7 and 10 are intended to assess this criterion. In winter term, only item # 3 met the bench mark of <10% unsatisfactory. In spring term all items met bench mark of <10% unsatisfactory except items 6, 7, and 9.

Assessment: Student Tracking

Tracking data indicates students generally have adequate experience in performing histories of present illness and past health, checking for allergy, taking blood pressure, pulse, respirations and performing oral exams, dental charting, periodontal charting, plaque indices, and caries assessment.

Assessment: Graduate Exit Survey

Most respondents (92.8%) reported agree or strongly agree that they were competent in this criterion.

Criterion 4.2: Use critical decision making skills to reach conclusions about the patient's dental hygiene needs based on all available assessment data.

Assessment: Student Tracking

Generally students are using decision making skills by utilizing drug references, decision making support tools, and other dental hygiene references.

Assessment: Graduate Exit Survey

All respondents reported agree or strongly agree that they were competent in this criterion.

Criterion 4.3: Collaborate with the patient and/or other health professionals to formulate a comprehensive dental hygiene care plan that is patient-centered and based on current scientific evidence.

Assessment: Chart Audit

Items 8 and 11 are intended to assess students' ability to collaborate with the patient and/or other health professionals to formulate a comprehensive dental hygiene care plan that is patient-centered and based on current scientific evidence. Neither item met bench mark in winter term; both items met bench mark in spring term.

Assessment: Graduate Exit Survey

Most respondents (92.8%) reported agree or strongly agree that they were competent in this criterion.

Criterion 4.4: Provide specialized treatment that includes preventive and therapeutic services designed to achieve and maintain oral health.

Assessment: Chart Audit

Items 18-19 & 22-26 are intended to assess this criterion. No item met bench mark in winter term. In spring term all items met bench mark except items 22 and 25.

Assessment: Mock Boards

Twenty-four students participated in mock boards in summer and fall 2007. Fourteen students passed with a 75% or better in summer and 10 students passed in fall. The area of greatest variance was calculus/tissue trauma. This category was worth 75 points. The highest score earned at both test times was 75 points; the lowest score earned in summer was 22 points and in the lowest score earned in fall was 21 points. A factor in considering the results of the mock board assessment is inconsistent patient criteria. Some students may have scored higher or lower because patients did not meet established criteria.

Assessment: WREB

Twenty-two students sat for WREB exams and twenty students passed. Detailed result reports are not available at this time.

Assessment: Graduate Exit Survey

One hundred percent of respondents reported agree or strongly agree that they achieved competency in this criterion.

Criterion 4:5: Evaluate the effectiveness of the implemented clinical, preventive, and educational services and modify as needed

Assessment: Chart Audit

Items 20-21 are intended to assess this criterion. Both items did not meet the bench mark in either chart audit period.

Criterion 4.6: Provide dental hygiene care for the child, adolescent, adult, and geriatric patient.

Assessment: Student Tracking

Generally, students treat a diverse range of patient ages. The majority of experience is with adults 18-49 years of age.

Assessment: Student Exit Survey

Most respondents agreed or strongly agreed that they were competent in treating the child and all respondents agreed or strongly agreed that they were competent in treating adult and geriatric patients.

Criteria 4.7 Provide dental hygiene care for all types of classifications of periodontal disease.

Assessment: Student Tracking

Generally students have experience providing dental hygiene care for all types of classifications of periodontal diseases. The majority of cases are mild and moderate.

Assessment: Graduate Survey

Most respondents agreed or strongly agreed that they were competent in this criterion. Some respondents reporting disagree or strongly disagree that they were competent in treating advanced, refractory, and aggressive classifications.

Strengths:

- Students have an adequate number of patient experiences in assessment procedures
- Students are able to use critical thinking and assessment data to reach conclusions about the patient's dental hygiene needs
- Students are able to determine comprehensive dental hygiene care plans that are based on evidence

- Students are well prepared to sit for and pass clinical board examinations
- Students have an adequate number of patient experiences in treating adult and geriatric patients
- Students have an adequate number of patient experiences in treating mild and moderate periodontitis.

Weakness:

- Student performance in managing radiographs/digital images, assessing oral hygiene status, and providing alternate treatment plans does not meet expectations
- Student performance in providing appropriate topical fluoride treatments does not meet expectations
- Student experience in nutrition counseling is inadequate
- Student experience in treating some ages and types of periodontal classifications is inadequate.

V Student Learning Improvement Plan

The department faculty met on Monday, July 14, 2008 to discuss the assessment results. The faculty understands that students must have an adequate number of patient experiences in order to be able to achieve competence. It appears that the most critical improvement needed at this time is to increase the diversity of patient experiences to include more complex cases. More complex cases would also provide students more practice in all learning outcome criteria. Jan Cope proposed and was awarded a grant to develop and implement a patient recruitment plan during summer 2008.

Secondly, the faculty realized that the only assessment data for criterion 4.2 is student reported. The faculty believes a more rigorous assessment measure may provide more meaningful data. In the future, students will be required to make case presentations at each level of the program. Case presentations will be evaluated using a standard grading rubric in order to increase reliability and validity of scores.

Additionally, assessment data clearly indicates students are not adequately evaluating the effectiveness of therapy. More emphasis will be placed on this skill in clinic and in the classroom.

Finally, data from chart audits and DHST is troublesome. The data suggests students may be under- or over- reporting. In order to help achieve consistency in reporting, chart audits will be performed by a committee consisting of trained students and instructors instead of as a class activity. Additionally, the chart audit instrument requires editing and updates. In order to help achieve accurate DHST reporting, students will be required to submit an instructor signed check-off. The signed check-off will be submitted to a designated person to be entered into Typhon.

VI Changes Resulting from Assessment

Steps have been taken in order to improve students' ability to appropriately manage radiographs. In order to overcome the temptation to take inappropriate radiographs for the patient, specific term requirements have been replaced with yearly goals. Another change has been to replace the radiology clinical assistant with a student radiologist. The student radiologist exposes and assesses all radiographs during the clinic session. This allows the radiology instructor to fully focus attention on supervising one or two students and gives each student equal opportunity to expose images during the term.

VII. References

- Oregon Institute of Technology Fact Book (2006-2007). <http://www.oit.edu/ir/factbook>

APPENDIX

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VIII. Appendices

COURSE MATRIX : Student learning outcome #4 can best be assessed in DH223; DH321-323, and DH421-423 Dental Hygiene Clinical Practice and Seminar.

Course Matrix												
	Pre-DH			Sophomore			Junior			Senior		
Fall	BIO231	A & P	4	DH221	Clinic/Sem	4	DH321	Clinic/Sem	3	DH422	Clinic/Sem	6
	CHE101	Chem	3	DH226	H & N	2	DH301	Dent Sci	3	DH476	Res/Ethics	1
	CHE104	Chem-L	1	DH240	Prevent	3	DH340	Prevent	3	Hum		3
	DHE 100	Intro DH	1	DH275	Ethics	1	DH381	Com DH	1	Com		3
	Math		4	CHE210	Pharm	3	DH375	Res/Ethics	1			
	WR121	Eng Comp	3	SPE 321	Group Com	3	BUS317	HC Manage	3			
							PSY301	Counsel	4			
Winter	BIO105	Micro	4	DH222	Clinic/Sem	3	DH322	Clinic/Sem	3	DH423	Clinic/Sem	6
	BIO232	A&P	4	DH202	Dent Sci	2	DH302	Dent Sci	2	DH477	Res/Ethics	1
	CHE102	Chem	3	DH241	Prevent	3	DH341	Prevent	2	DH454	Prac Manage	3
	CHE105	Chem-L	1	DH252	Oral Rad	3	DH382	Com DH	2	Hum		3
	DH101	Intro DH	1	DH276	Res/Ethics	1	DH376	Res/Ethics	1			
	WRI122	Eng Comp	3	PSY311	Hum G & D	3	DH351	Pain Manage	2			
								DH363	Dent Materials	2		
							Math361	Stats	4			
Spring	BIO233	A&P	4	DH223	Clinic/Sem	3	DH323	Clinic/Sem	5			
	CHE103	Chem	3	DH242	Prevent	3	DH303	Dent Sci	2			
	CHE106	Chem-L	1	DH253	Oral Rad	2	DH383	Com DH	2			
	SOC204	Sociology	3	DH254	Intro Perio	1	DH377	Res/Ethics	1			
	SPE111	Speech	3	DH267	ER Procedures	3	DH352	Pain Manage	3			
	WRI123	Eng Comp	3	DH380	Com DH	2	DH364	Dent Materials	3			
					PSY312	Hum G & D	3					
SU										DH421	Clinic/Sem	6
										DH477	Res/Ethics	1
										BUS331	Pers Finance	3
										Hum		3

**CLASS 2009
EXPERIENCES: SPRING 2008**

Student	Total Cases	Total Clinical Hours	Ave Minutes/patient	Consult Hours	Rural Visits	Under-served	Public Health
	51	58.4	69	10.9	0	0	6
	58	93.1	96	1.1	0	0	0
	57	74	78	0.6	0	0	0
	32	73.5	138	6.4	7	0	1
	30	41	82	0.6	3	0	3
	58	82.9	86	0.6	0	0	0
	57	88.3	93	10.5	5	7	5
	39	62	95	0	0	0	0
	59	90.2	92	13.9	0	0	0
	70	89.4	77	1	5	5	5
	51	76.1	90	0.3	0	1	3
	47	77.9	99	2.8	1	2	1
	56	76	81	3.4	0	0	0
	44	52.8	72	10.6	0	0	0
	51	75	88	0.6	3	1	8
	32	65.5	123	4.7	0	0	0
	44	70.8	97	0	7	1	8
	50	81.4	98	3.4	0	0	2
	38	85.2	134	23	0	0	0
	38	47.3	75	7.2	0	0	0
	20	40.3	121	5.1	0	0	0
	41	89.7	131	0.5	0	0	0
	36	58.3	97	13.1	25	1	2
	51	94.5	111	10.5	0	0	1
TOTAL	1110	1743.6	2323	130.8	56	18	45
MAX	70	94.5	138	23			
MIN	20	40.3	69	0			
AVG	46.25	72.65	96.79167	5.45			

**CLASS 2009
PERIODONTAL STATUS 2008**

Student	Healthy	Mild	Moderate	Severe	N/A	Total per Student
	0	32	7	7	3	49
	2	47	8	1	0	58
	0	32	19	1	1	53
	3	10	4	1	14	32
	1	19	9	1	0	30
	3	27	9	14	3	56
	18	27	10	2	0	57
	1	24	7	7	0	39
	8	29	21	1	0	59
	4	49	8	9	0	70
	3	36	10	1	0	50
	0	21	12	8	4	45
	1	25	18	7	5	56
	1	23	9	2	5	40
	3	23	19	6	0	51
	1	12	11	8	0	32
	0	24	12	7	0	43
	2	31	6	4	2	45
	9	13	13	1	0	36
	0	19	10	2	0	31
	0	5	9	3	3	20
	15	15	9	2	0	41
	1	21	6	1	7	36
	5	30	9	7	0	51
TOTAL	81	594	255	103	47	1080
MAX	18	49	21	14		70
MIN	0	5	4	1		20
AVG	3.375	24.75	10.625	4.291667		45

**CLASS 2009
PATIENT AGE: SPRING 2008**

Student	<2 yrs	2-4 yrs	5-11 yrs	12-17 yrs	18-49 yrs	50-64 yrs	≥65 yrs	65-74 yrs	75-84 yrs	85-100 yrs	>100 yrs	
	0	0	8	6	19	7	9	6	3	0	0	
	1	4	8	0	28	7	10	4	5	1	0	
	0	1	3	3	25	12	9	5	3	1	0	
	0	0	3	0	16	7	6	3	3	0	0	
	0	1	6	1	14	4	4	2	1	1	0	
	0	1	11	2	20	17	5	0	4	1	0	
	0	1	9	6	12	12	17	7	6	4	0	
	0	0	1	3	19	11	5	4	1	0	0	
	0	2	5	6	24	11	11	4	6	1	0	
	0	0	13	2	31	16	8	0	7	1	0	
	0	2	9	2	20	8	9	5	2	2	0	
	0	0	6	0	23	9	7	4	2	1	0	
	0	0	9	1	17	9	20	9	10	1	0	
	0	0	1	0	24	9	6	6	0	0	0	
	0	2	9	2	12	16	10	6	4	0	0	
	0	0	4	2	15	8	3	0	2	1	0	
	0	1	5	6	10	12	9	7	2	0	0	
	0	0	2	3	25	7	8	6	2	0	0	
	2	0	2	2	9	9	12	3	8	1	0	
	0	0	3	1	16	7	4	2	2	0	0	
	0	0	1	0	2	6	11	3	7	1	0	
	0	0	3	6	9	17	6	4	2	0	0	
	10	0	1	1	15	4	5	4	1	0	0	
	0	0	6	4	21	13	7	1	6	0	0	
TOTAL	12	15	128	59	426	238	201	95	89	17	0	
MAX	10	4	13	6	31	17	20	9	10	4	0	
MIN	0	0	1	0	2	4	3	0	0	0	0	
AVG	1	1	5	2	18	10	8	4	4	1	0	

CLASS 2009
H & P DATA SET: SPRING 2008

Student	Present illness	Past health	Allergy Check	Oral exam	Dental charting	Perio charting	Caries risk	Plaque index	Pulse	Resp	Blood pressure
	1	2	4	4	3	3	1	1	4	4	4
	11	11	11	11	10	8	9	3	9	9	9
	39	41	39	30	21	14	19	0	40	41	40
	3	8	6	8	4	5	6	0	8	8	8
	1	6	8	9	5	3	5	5	10	10	10
	12	12	8	11	9	7	8	1	13	12	13
	4	7	8	8	8	8	7	5	8	8	8
	1	9	8	11	7	6	7	6	11	11	11
	10	43	37	29	18	15	16	0	42	40	42
	59	59	61	35	22	21	23	3	53	53	52
	0	9	9	9	6	6	6	2	10	10	10
	21	26	22	24	19	19	19	13	26	25	26
	1	10	8	11	9	8	9	3	11	11	11
	4	6	7	7	6	6	8	2	7	7	7
	16	24	33	26	21	18	19	5	33	33	33
	4	8	3	22	11	11	9	0	24	24	24
	31	31	31	34	14	14	13	3	31	31	31
	26	34	35	30	12	14	11	1	35	33	38
	2	17	31	31	21	19	18	0	31	31	31
	8	11	11	10	9	9	9	6	12	12	11
	3	6	8	10	10	6	8	4	12	12	12
	16	28	34	33	28	22	25	4	34	34	34
	18	25	24	20	17	15	16	3	26	23	28
	1	2	2	4	4	4	2	2	4	4	4
TOTAL	292	435	448	427	294	261	273	72	494	486	497
MAX	59	59	61	35	28	22	25	13	53	53	52
MIN	0	2	2	4	3	3	1	0	4	4	4
AVG	12.17	18.13	18.67	17.79	12.25	10.88	11.38	3.00	20.58	20.25	20.71

**CLASS 2009
EVIDENCE BASED PRACTICE: SPRING 2008**

Student	Consult drug book	Consult decision support tools	Consult DH reference
	1	0	1
	2	3	1
	1	1	4
	6	0	2
	2	0	0
	6	1	4
	9	0	0
	7	0	1
	6	0	9
	8	1	1
	2	0	0
	1	0	0
	0	0	0
	12	2	0
	10	1	10
	5	0	4
	5	0	3
	8	0	13
	8	7	14
	4	0	3
	0	0	0
	9	1	17
	7	1	20
	14	6	30
TOTAL	133	24	137
MAX	14	7	30
MIN	1	0	1
AVG	5.54	1.00	5.71

**CLASS 2010
EXPERIENCES: SPRING 2008**

Student	Total Cases	Total clinic hrs	Avg min/patient	Consult hours	Rural visits	Under-Served	Public health
	5	11.3	136	0	1	0	0
	18	34.3	114	2	0	0	0
	13	24.3	112	1	0	0	0
	18	31.1	104	0	0	0	0
	9	19.5	130	3.9	0	0	0
	20	29.1	87	4	0	2	5
	18	26.5	88	3.8	1	0	2
	11	26.6	145	3	0	0	0
	17	37.6	133	0	0	0	0
	18	24.7	82	5.8	0	0	1
	20	20.5	62	0.4	0	0	5
	19	30.8	97	4.4	0	0	0
	19	23	73	0	0	0	0
	14	20.5	88	2	0	0	0
	10	26.2	157	6	0	0	0
	20	34.4	103	0	0	0	0
	12	30.5	152	0	0	0	0
	14	29.9	128	3	0	0	0
	18	28.4	95	1.8	0	0	0
	20	26.9	81	0	0	0	0
	14	33.3	143	0	0	0	0
	6	10.8	108	1.1	0	0	0
	16	32.3	121	0	0	0	3
	15	36.3	145	0	0	0	0
	16	35.4	133	3.9	0	0	3
TOTAL	380	684.2	2817	46.1	2	2	19
MAX	20	37.6	157	157	157	157	157
MIN	5	10.8	62	0	0	0	0
AVG	15.2	27.368	112.68	1.844	0.08	0.08	0.76

**CLASS 2010
PERIODONTAL STATUS: SPRING 2008**

Student	Healthy	Mild	Moderate	Severe	N/A	Total per student
	0	3	1	0	0	4
	0	16	1	1	0	18
	0	4	1	0	7	12
	0	18	0	0	0	18
	1	7	1	0	0	9
	0	10	6	2	0	18
	3	13	2	0	0	18
	4	6	0	1	0	11
	1	14	2	0	0	17
	0	14	1	2	0	17
	0	18	2	0	0	20
	0	0	0	0	19	19
	1	15	2	0	0	18
	3	11	0	0	0	14
	2	7	1	0	0	10
	1	10	6	1	0	18
	1	11	0	0	0	12
	8	0	2	0	4	14
	3	15	0	0	0	18
	0	19	1	0	0	20
	4	7	1	2	0	14
	1	4	1	0	0	6
	1	11	4	0	0	16
	0	9	0	0	6	15
	0	16	0	0	0	16
TOTAL	34	258	35	9	36	372
MAX	8	19	6	2		
MIN	0	0	0	0		
AVG	1.36	10.32	1.4	0.36		

CLASS 2010
PATIENT AGE: SPRING 2008

Student	<2 yrs	2-4 yrs	5-11 yrs	12-17 yrs	18-49 yrs	50-64 yrs	≥65 yrs	65-74 yrs	75-84 yrs	85-100	>100 yrs	
	0	0	0	0	3	0	1	0	1	0	0	5
	0	2	2	0	6	2	6	4	2	0	0	24
	0	0	4	2	5	1	0	0	0	0	0	12
	0	1	2	0	11	3	1	1	0	0	0	19
	0	0	1	0	6	1	1	0	1	0	0	10
	0	2	4	1	10	0	1	0	1	0	0	19
	0	0	3	1	11	2	1	0	1	0	0	19
	0	0	1	1	6	0	3	2	1	0	0	14
	0	0	5	0	7	3	2	2	0	0	0	19
	0	0	6	0	7	3	1	1	0	0	0	18
	0	0	2	6	11	0	1	1	0	0	0	21
	0	0	3	3	13	0	0	0	0	0	0	19
	0	0	2	1	11	1	4	1	3	0	0	23
	0	2	3	2	7	0	0	0	0	0	0	14
	0	0	0	0	6	2	2	2	0	0	0	12
	0	0	3	0	10	5	1	0	1	0	0	20
	0	0	3	1	8	0	0	0	0	0	0	12
	0	2	1	3	3	3	2	2	0	0	0	16
	0	1	6	1	7	0	3	2	1	0	0	21
	0	3	3	1	11	1	1	1	0	0	0	21
	0	0	4	3	3	4	0	0	0	0	0	14
	0	2	0	0	4	0	0	0	0	0	0	6
	0	4	2	0	6	4	0	0	0	0	0	16
	0	0	1	0	10	1	3	2	1	0	0	18
	0	0	6	0	7	2	1	1	0	0	0	17
TOTAL	0	19	67	26	189	38	35	22	13	0	0	409
MAX	0	4	6	6	13	5	6	4	3	0	0	24
MIN	0	0	0	0	3	0	0	0	0	0	0	5
AVG	0	1	3	1	8	2	1	1	1	0	0	16

**CLASS 2010
H & P DATA SET: SPRING 2008**

Student	Present illness	Past health	Allergy Check	Oral exam	Dental charting	Perio charting	Caries risk	Plaque index	Pulse	Resp	Blood pressure
	14	16	16	16	8	7	8	1	16	12	16
	11	11	12	12	9	9	9	1	12	12	12
	4	3	6	8	7	7	4	1	8	8	8
	31	32	32	33	14	15	14	2	19	19	25
	21	26	31	19	12	11	8	1	28	28	34
	4	7	6	11	5	3	5	4	11	11	11
	3	13	9	10	8	8	7	2	10	10	10
	2	3	0	24	19	18	21	0	24	24	26
	23	29	22	24	14	12	12	0	17	18	23
	13	46	48	48	26	20	29	11	45	45	45
	2	7	8	8	6	5	6	1	8	8	8
	20	31	29	34	20	17	17	6	37	37	37
	0	8	6	9	5	5	5	2	10	10	10
	3	5	7	8	6	4	6	3	8	8	8
	22	27	23	23	13	13	14	3	33	33	33
	30	31	28	25	16	15	16	3	28	28	32
	10	10	10	10	8	6	9	2	10	10	10
	2	5	8	8	7	6	7	3	9	9	9
	35	35	32	32	19	15	22	1	38	38	38
	26	28	25	21	17	17	17	9	35	35	35
	13	21	22	22	11	10	11	1	28	28	28
	17	15	17	16	15	14	10	7	17	17	16
	10	11	11	11	4	3	5	4	10	10	11
	0	5	0	4	6	6	6	3	12	12	12
	19	37	36	31	23	19	23	3	37	37	39
TOTAL	335	462	444	467	298	265	291	74	510	507	536
MAX	35	46	48	48	26	20	29	11	45	45	45
MIN	0	3	0	4	4	3	4	0	8	8	8
AVG	13.4	18.48	17.76	18.68	11.92	10.6	11.64	2.96	20.4	20.28	21.44

**CLASS 2010
H & P DATA SET: SPRING 2008**

Student	Consult drug book	Consult decision support tools	Consult DH reference
	1	0	1
	5	0	1
	0	0	0
	3	4	4
	3	0	0
	1	0	3
	1	0	0
	1	0	9
	3	0	1
	2	0	4
	2	0	2
	1	0	3
	0	0	0
	5	0	8
	2	0	1
	3	0	0
	0	0	0
	2	0	0
	1	0	0
	3	0	2
	2	0	3
	0	0	2
	2	0	5
	3	0	3
	1	0	16
TOTAL	47	4	68
MAX	5	4	16
MIN	0	0	0
AVG	1.88	0.16	2.72

DENTAL HYGIENE CHART AUDIT

Winter 2008

Random Sample n = 22

	Percent	S	U	NA
Assessment				
1. Comprehensive medical history completed or updated and signed	59	23	18	
2. Extraoral exam completed or update and findings accurately recorded	64	14	23	
3. Intraoral exam completed or updated and findings accurately recorded	68	9	23	
4. Dental charting recorded	55	18	27	
5. Periodontal charting recorded	41	18	41	
6. Radiographs taken according to guidelines, labeled, filed, and diagnostic	55	14	32	
7. Oral hygiene status and client homecare behaviors assessed & recorded	55	18	27	
8. Dental hygiene treatment plan is individualized for client's needs	59	18	27	
9. Alternative treatment plans are provided	32	32	36	
10. Comprehensive assessment performed at appropriate intervals	55	14	32	
11. Consults with dentists and other health professions when needed and appropriately documents	23	27	50	
Dental Exam				
12. Client has had a dental exam within the previous 18 months	32	36	7	
13. Client is referred to dentist of record or provided list of local dentists	23	32	45	
14. Radiographs are mailed to dentist of record	23	18	59	
Informed Consent				
15. Client is provided consent prior to initializing treatment including the nature of the condition, the proposed care plan, the risk involved, the potential for failure, the expected outcomes if problem goes untreated, and alternative procedures that might be used.	45	18	26	
16. Informed consent is signed by patient	50	18	32	
17. Patient is provided "Bill of Rights"	41	23	36	
Dental Hygiene Services				
18. Client receive care appropriate for their needs	59	14	27	
19. Treatment is provided in a timely manner	64	9	27	
20. Treatment is completed	59	14	23	
21. Therapy outcomes are documented and evaluated	41	27	32	
Prevention				
22. Topical fluoride treatments that are appropriate for client's caries risk are provided	55	18	27	
23. Pit and fissure sealants are provided appropriate for client's needs	18	14	68	
24. Oral hygiene instruction is appropriate to client's age, ability, and oral condition	59	14	27	
25. Nutrition counseling is offered to clients with risks for caries	14	23	64	
26. Client is provided with individualized self-care instruction	55	14	32	

DENTAL HYGIENE CHART AUDIT

Spring 2008

Random Sample n = 98

	Percent	S	U	NA
Assessment				
27. Comprehensive medical history completed or updated and signed	92.86	5.10	1.02	
28. Extraoral exam completed or update and findings accurately recorded	87.76	7.14	4.08	
29. Intraoral exam completed or updated and findings accurately recorded	86.73	9.18	4.08	
30. Dental charting recorded	85.71	6.12	7.14	
31. Periodontal charting recorded	75.51	8.16	16.33	
32. Radiographs taken according to guidelines, labeled, filed, and diagnostic	62.24	10.20	27.55	
33. Oral hygiene status and client homecare behaviors assessed & recorded	77.55	12.24	9.18	
34. Dental hygiene treatment plan is individualized for client's needs	81.63	7.14	9.18	
35. Alternative treatment plans are provided	35.71	24.49	36.73	
36. Comprehensive assessment performed at appropriate intervals	70.41	5.10	24.49	
37. Consults with dentists and other health professionals when needed and appropriately documents	55.10	8.16	34.69	
Dental Exam				
38. Client has had a dental exam within the previous 18 months	40.82	29.59	29.59	
39. Client is referred to dentist of record or provided list of local dentists	52.04	20.41	27.55	
40. Radiographs are mailed to dentist of record	28.57	16.33	53.06	
Informed Consent				
41. Client is provided consent prior to initializing treatment including the nature of the condition, the proposed care plan, the risk involved, the potential for failure, the expected outcomes if problem goes untreated, and alternative procedures that might be used.	85.71	7.14	7.14	
42. Informed consent is signed by patient	89.8	3.06	7.14	
43. Patient is provided "Bill of Rights"	91.84	5.10	3.06	
Dental Hygiene Services				
44. Client receives care appropriate for their needs	86.73	4.08	9.18	
45. Treatment is provided in a timely manner	82.65	7.14	10.20	
46. Treatment is completed	67.35	14.29	17.35	
47. Therapy outcomes are documented and evaluated	56.12	16.33	26.53	
Prevention				
48. Topical fluoride treatments that are appropriate for client's caries risk are provided	63.27	11.22	25.51	
49. Pit and fissure sealants are provided appropriate for client's needs	8.16	4.08	97.76	
50. Oral hygiene instruction is appropriate to client's age, ability, and oral condition	73.47	8.16	17.35	
51. Nutrition counseling is offered to clients with risks for caries	19.39	17.35	63.27	
52. Client is provided with individualized self-care instruction	76.53	8.16	15.31	

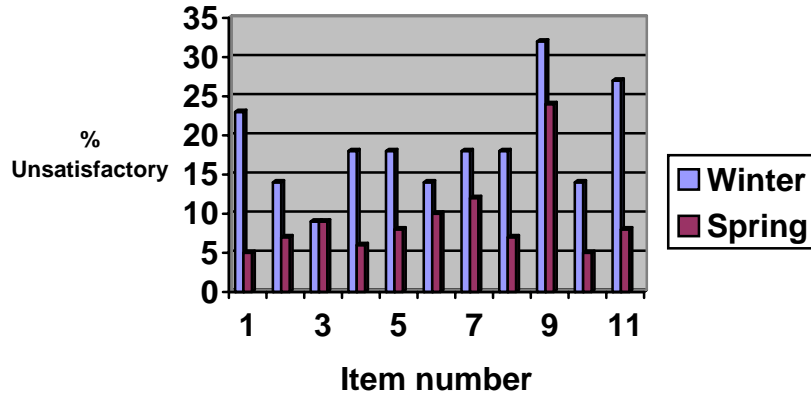
1 chart = no show

1 chart = cancel

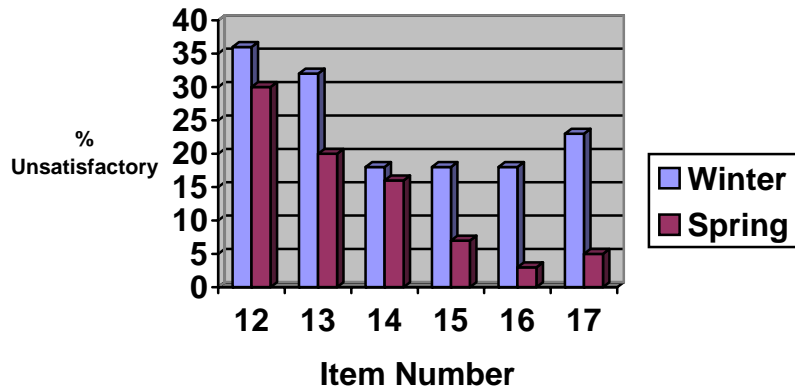
1 chart = pt dismissed due to high blood pressure

CHART ADULT COMPARISON
Winter 2008, Spring 2008

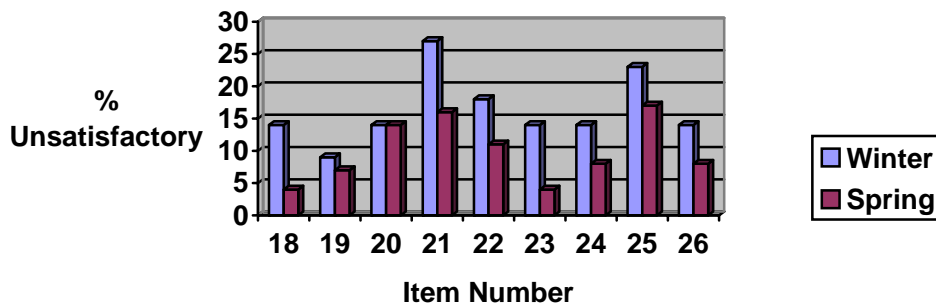
Assessment



Dental Exam & Informed Consent



DH Services & Prevention



MOCK BOARD EXAMINATION

**Class 2008
Summer 2007**

Student	Probe Recession (15)	EO/IO (10)	Calculus (75)	Penalty	Total
	15	8	33	Qualified -4 x-rays	52
	12.5	8.7	75	Process only - 4 first sub not accepted, -3 2nd sub not accepted	89.2
	12.5	9	69	Process only -4 for x-rays	86.5
	15	7.35	75	process only	97.35
	15	6.55	39	Qualified -4 x-rays	60.55
	12.5	5.79	51	Nearly qualified 11 clicks in two quads -4 for x-rays	65.29
	12.5	8.55	63	Process only	84.05
	15	8.75	63	Process only	86.75
	12.5	11	39	Qualified in two -4 x-rays	58.5
	15	8.89	75	Process only	98.89
	15	9.75	69	Qualified -4 x-ray penalty	89.75
	12.5	6.33	15	Qualified	48
	15	7.5	57	Process Only	79.5
	10	10	63	Process Only	83
	12.5	8.35	33	Qualified in one quad	53.85
	5	8.35	51	Nearly qualified 11 clicks in one quad	64.35
	7.5	6.85	57	Qualified in one quad	71.35
	12.5	8	57	Qualified in two quads	77.5
	12.5	9	57	Nearly qualified /11 clicks in two quads	78.5
	10	10	69	Qualified in one quad did two	89
	15	7.78	57	Qualified /13 clicks in two quads -4 x-ray penalty	75.78
	15	9.5	75	Process only	99.5
	15	8.88	45	Qualified in one quad -4 first sub rejected	64.88
	12.5	8	45	Qualified in one quad -4 first submission rejected	61.5

MOCK BOARD EXAMINATION

**Class 2008
Fall 2007**

Student	Probe Recession (15)	EO/IO (10)	Calculus (75)	Penalty	Total
	10.00	10.00	45.00	-4	61.00
	12.50	10.00	39.00		61.50
	12.50	10.00	21.00		43.50
	15.00	9.00	21.00		45.00
	10.00	10.00	51.00		71.00
	15.00	7.75	27.00		49.75
	12.50	6.90	33.00		52.40
	12.50	9.00	33.00		54.50
	15.00	9.35	39.00	-4	59.35
	12.50	10.00	33.00	-4	51.50
	10.00	10.00	67.00		87.00
	15.00	6.55	57.00		78.55
	15.00	10.00	27.00		52.00
	15.00	9.75	63.00		87.75
	12.50	10.00	27.00		49.50
	12.50	7.00	33.00	-4	48.50
	10.00	8.35	57.00		75.35
	12.50	9.00	57.00		78.50
	12.50	7.35	63.00		82.85
	12.50	8.00	63.00		83.50
	15.00	10.00	57.00		82.00
	15.00	8.00	27.00		50.00
	15.00	9.55	27.00		51.55
	12.50	8	75.00		95.50

GRADUATE EXIT SURVEY
Oregon Institute of Technology
Dental Hygiene Program
Bachelor Science in Dental Hygiene

This is an anonymous survey to assess the effectiveness of the OIT Dental Hygiene Program in meeting its stated goals and student learning outcomes. Please select the response that most closely reflects your opinion by checking the appropriate box (√). Please add any additional comments that provide constructive feed-back for improvement of the program.

General Instruction Please rate your overall satisfaction with the following:	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied
1. Overall quality of instruction in the dental hygiene program	2	12		
2. Academic advising		8	3	3
3. Clinic advising		9	5	
4. Quality of:				
a. Facility (clinic, radiology suites, labs)	4	8	2	
b. Facility (class rooms)	1	11	2	
c. Technology (clinic, radiology, labs)	3	7	4	
d. Technology (classrooms)	3	10	1	

Comments:
DS with Eaglesoft Software & required computer purchase
I didn't feel that my advisor was very helpful. I normally went to other instructors for help with making my schedule each term
Clinic lectures were a waste of time-mostly Jr & Sr years. There is info to be covered & we didn't utilize our time effectively. Very disappointing
The sterilization room is gross because people don't follow protocol, change gloves, etc. I think the whole room is dirty
I feel that the EagleSoft system should have been better researched before requiring students to purchase such expensive computers

Transferable Skills The OIT Dental Hygiene program helped me increase my:	Strongly Agree	Agree	Disagree	Strongly Disagree
1. Reading skills	3	7	4	
2. Writing skills	1	9	3	1
3. Speaking skills	5	9		
4. Listening skills	6	8		
5. Interpersonal and communication skills	10	4		
6. Problem solving skills	5	7	2	
7. Adaptability skills	6	8		
8. Information processing skills	4	10		
9. Teamwork skills	7	7		
10. Responsibility skills	9	5		

Comments: I was very disciplined & worked hard				
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Student Learning Outcomes The OIT Dental Hygiene program prepared me to be able to:	Strongly Agree	Agree	Disagree	Strongly Disagree
1. Discern and manage ethical issues of dental hygiene practice in a changing environment	4	10		
2. Comply with state and federal laws governing the practice of dentistry and dental hygiene	3	11		
3. Utilize critical thinking, scientific theory and evidence in decision making regarding patient care and the promotion of health and wellness to individuals and communities	4	10		
4. Continuously perform self-assessment for life-long learning and professional growth	4	9		
5. Provide planned educational services using appropriate interpersonal skills and educational strategies to promote health	4	10		
6. Communicate effectively with individuals and groups from diverse populations both verbally and in writing	4	8	2	
7. Improve access to care by providing community oral health services such as needs assessment, screening, referral, and educational services	7	7		
8. Facilitate access to oral health services by influencing individuals and/or organizations for the provision of dental hygiene preventive and therapeutic services	4	8	2	
9. Systematically collect, analyze, and record data on the general, oral, and psychosocial health status of a variety of patients using methods consistent with medico-legal principles	6	7	1	
10. Use critical decision making skills to reach conclusions about the patient's dental hygiene needs based on all available assessment data	4	10		
11. Collaborate with the patient /client, and or other health professionals to formulate a comprehensive dental hygiene care plan that is patient centered and based on current scientific evidence	5	8	1	
12. Provide specialized treatment that includes preventive and therapeutic services designed to achieve and maintain oral health	5	9		
13. Evaluate the effectiveness of the implemented clinical, preventive, and educational services and modify as needed	5	8	1	
14. Promote the profession through service activities and affiliations with professional organizations	3	10	1	
15. Possess transferable skills, e.g., communication, problem-solving, and critical thinking to take advantage of opportunities that may increase individuals' and communities' access to dental hygiene care, influence the profession, and/or change the healthcare environment.	6	8		
16. Comments: The handbook is written for a reason and it should be implemented as it is stated. No exceptions!! If someone is unethical they should be dismissed. If they drop the class they shouldn't be allowed in clinic Where's the question about student-instructor respect/disrespect? And, where is the question about friendliness of instructors? (#11 We would get marked down for this!)				

Competencies The OIT Dental Hygiene program prepared me to be competent in	Strongly Agree	Agree	Disagree	Strongly Disagree
1. Providing dental hygiene care for the child patient	5	8	1	
2. Providing dental hygiene care for the adolescent patient	3	10	1	
3. Providing dental hygiene care for the adult patient	7	7		
4. Providing dental hygiene care for the geriatric patient	7	7		
5. Providing the dental hygiene process of care including assessment, planning, implementation, and evaluation	6	8		
6. Providing dental hygiene care for all types of periodontal disease				
• Gingivitis	5	9		
• Slight chronic periodontitis	5	9		
• Moderate chronic periodontitis	5	9		
• Advanced chronic periodontitis	4	8	1	1
• “Refractory” periodontitis	1	8	3	2
• Aggressive periodontitis	3	8	2	1
7. Assessing, planning, implementing and evaluating community-based oral health programs	2	11	1	
8. Providing appropriate life support measures for medical emergencies	2	9	3	
9. Applying ethical, legal, and regulatory concepts to the provision and/or support of oral health care services	4	10		
10. Self-assessment skills in preparation for life-long learning	3	10	1	
11. Evaluation of scientific literature	1	10	2	
12. Problem solving strategies related to comprehensive patient care and management of patients	2	12		
Comments: #6V: Haven't seen a pt w/this. #11: Still slightly confusing I don't feel I'm competent in a lot of these areas, but I have a base to start with. Medical Emergencies classes should be required every year to keep things fresh in our minds. Good perio project Jr year. Liked mock board X2. Would have liked more time on products, techniques for instrumentation, sharing what we learn in clinic in classroom format. More clinical instructors I don't feel that I had enough med emergency training I believe most of my competence comes from self-learning. I believe OIT's Hygiene program was a part of my competence, but <u>NOT</u> the majority of my personal success.				

Questions

Please respond to the following questions:

1. In the OIT Dental Hygiene program, what most helped your learning and what should we continue doing?
 - Extreme testing during soph year. I believe I passed my national boards because of soph year.
 - Small ratio of students to teachers, i.e. clinic
 - I enjoyed this program a lot. I would recommend it to other students; there are a few really wonderful teachers. I will miss them!
 - Off-campus, hands on, IEP
 - PowerPoints, hands on learning, practicing on each other.
 - Keep the competencies – they make us do things we wouldn't do otherwise. Make us see more adolescents & kids. Plus help us recruit these patients.
 - Role playing, case studies, mock boards, board review class, working on typodonts & each other
 - Overall, the DH staff should continue on having a positive learning environment where students feel safe to ask questions, are motivated to learn, and not be scared to be wrong or “not know” something. Instructors who are hard to approach or are abrasive make it hard to learn & stay motivated.
 - Open door policies by teachers. The fact that when I had a question I always felt I could go to them. I liked the fact that I wasn't always treated like a little kid. That the teachers could joke around & have a good time with the students. It makes it more laid back & not as stressful.
 - Clinic, off-campus experience, community projects, communication skills
 - Off-campus experience has been amazing – this is definitely a “must-have!”
 - I think that off-campus experience should be implemented earlier than the senior year.
2. What hindered your learning in the OIT Dental Hygiene program?
 - Negative instructors
 - 2 teachers in particular were not consistent in their teaching. Made for an extremely confusing couple of terms.
 - Unprofessional and disrespectful. These put me down, made me feel negative, and rumors are not a good thing.
 - No being calibrated amongst teachers & staff. It was very difficult to hear two different things from two different people & know what to do with it. The negativity from teachers toward students & being down graded in front of patients.
 - The only that that made a difference in how I learned was the consistency with clinic instructors. I understand it is impossible to have 100% identical teaching & knowledge standards, but it is hard when you are being told 2 different things & how you are graded for daily evals and competencies.
 - I felt at times that certain instructors were out to punish us instead of teach us. They were always trying to find something wrong with what we were doing. Ex: wearing a gown in the hallway, unachieved for applying durafluor to a wet tooth.
 - Inconsistency of instructors – poor feedback- lack of available instruction in clinic. Very frustrating
 - Ridiculous rule changes
 - All of the drama and stress. My classmates were loud and one person continued to be late and it was distracting.

- Politics, the way “situations” are dealt with. Instructor indifference
 - All the drama, not just with students, but with teachers. It’s kind of sad when you hear teachers gossiping about the students and causing problems.
 - Professors with a harsh attitude towards my questions (when asked), my patients, and did not devote the amount of time towards her students.
 - The negative atmosphere shown by all instructors, in clinic, lab, and class
3. What suggestions do you have for improving the OIT Dental Hygiene program?
- Be more positive toward learning, and have more time for the student when they ask questions. Have the instructors stop talking about students with other students.
 - Calibrate instructor “requirements” in clinic. It is too confusing when everyone isn’t on the same page. Otherwise – thank you all for your help – overall you are all “Amazing!”
 - Set rules and policy
 - Don’t threaten peoples’ grades with competencies. If a patient doesn’t present & the student has really tried to get it done, don’t penalize them for one thing. Also, the department needs to help get patients into clinic. It shouldn’t be the sole responsibility for the students to find patients. It is very hard to fill your book on your own. Not many people in the community know about the clinic so there needs to be more done from the school to make the community aware we are up here.
 - Make a point for instructors to understand how extremely important it is to maintain professionalism while teaching. Don’t let things that happen in your private life hinder the way you teach or the attitudes you bring to class. Also understand that gossiping about students to other students always gets back to the student being talked about.
 - Collaboration between all teachers/clinic instructors. Avoid gossiping about students from teacher to students. Incorporating more curriculum into the last term of seminar (I didn’t learn anything this last term in seminar). More terms on perio, oral path, and dental science and less research & ethics class. Evaluating “new items” to be bought each year. We got duplicates of some things and were unable to return them.
 - Help us get board qualifying patients throughout the program so we can become better clinicians. Eliminate the negative teaching - it does not promote learning.
 - It would help if instructors were consistent and calibrated
 - Try and make it less stressful by not having fundraising and let students pay to go to conferences and such. More clinical instructors!
 - Instructors communicating more effectively with students and to be more available.
 - It is unbelievable to me that students can be unethical and not be punished for fear of being sued. It really makes our school and program look pretty sad.
 - Have all instructors at the same level in clinic; make sure we always have enough instructors in clinic.
 - Understand that we are newbies and are not wanting to question your authority, but we are human beings and pay for luxury to show our true selves and get upset at ya once in awhile. Please stop talking crap about your students, we do hear about it!!!