

**Assessment of Teaching at the School Dental Medicine  
Report**

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## Educational Programs in the School of Dental Medicine

- Doctor of Dental Medicine (DMD)
- Associate of Science or Baccalaureate Degree in Dental Hygiene
- Doctor of Philosophy (PhD) and Master of Science (MS) in Oral and Craniofacial Sciences
- Advanced Dental Education and Residency Programs in Endodontics, Orthodontics and Dentofacial Orthopedics, Pediatric Dentistry, Periodontics, Prosthodontics

Each program administers assessment of teaching appropriate to their curriculum and learning experiences provided to their students/trainees. Selected components of assessment of teaching are conducted at the School level as well applicable to all faculty.

## Assessment of Teaching at the School Level

The following assessment types have been in place at the School of Dental Medicine since 2015; see detailed description below.

- ✓ Self-assessment and reflection
- ✓ Department chair feedback
- ✓ Teaching component in promotion dossier (teaching portfolio)
- ✓ Multi-pronged review of teaching
- ✓ Teaching awards, grants and other recognition of teaching innovation and excellence
- ✓ Evidence of student learning outcomes

The review of School level assessment of teaching revealed no need to consider any changes at this point.

As part of the annual evaluation and the promotion processes, every faculty member who is involved in teaching participate in self-assessment of teaching, assemble teaching materials in a teaching portfolio style, and submit a review of their teaching by their department chairs.

**1. Full-Time Faculty Annual Review (50% or greater)**

- a. Full-time faculty members are asked to
  - i. Describe and reflect on the feedback they received from students (OMET and other evaluations), instructional design review and content review. The description includes changes they implemented to their courses in response to any of the feedback listed above.
  - ii. Describe educational innovations and any additional changes in their teaching that they implemented in the year of the review.
  - iii. Provide an overall self-assessment of their teaching and their ability to achieve their personal teaching goals:
    1. Did not meet departmental expectations.
    2. Met department expectations.
    3. Good year; exceeded departmental expectations.
    4. Very good year; greatly exceeded departmental expectations.
    5. Excellent year: effort and productivity were the maximum that can be expected of anyone.
  - iv. Provide a self-assessment and evaluation of teaching related to previous year's plans and objectives.
  - v. Describe their progress towards promotion/advancement/career goal related to teaching.
  - vi. Provide an evaluation of their level of personal satisfaction with the year's accomplishments related to teaching and the degree to which they achieved last year's goals, identify factors that were most helpful in achieving their goals and factors that most hindered them in accomplishing their goals.
- b. Department chairs are asked to
  - i. Provide an assessment of overall performance of the faculty member's level of contribution to the department related to teaching using the following scale:
    1. Did not meet departmental expectations.
    2. Met department expectations.
    3. Good year; exceeded departmental expectations.
    4. Very good year; greatly exceeded departmental expectations.
    5. Excellent year: effort and productivity were the maximum that can be expected of anyone.
  - ii. Provide a narrative justification of their assessment above.
- c. The Dean and Senior Associate Dean independently review each faculty member's annual evaluation form (reflection, self-assessment and their chair's assessment). Their review is a high-level review for completeness, concerns, culture of faculty support, meeting specified balance in responsibilities and

expectations, and identifying faculty for promotion. The expectation is that any teaching related issues have been discussed and resolved at the chair level. Intervention happens at the Dean's level only if the former did not happen, there were unresolved disagreement with the review, and/or faculty or departments have not met curricular needs.

## **2. Part-Time Faculty Annual Review (less than 50%)**

- a. Part-time faculty members are asked to
  - i. Provide self-assessment in the following areas related to their teaching:
    1. Appropriate levels of teaching, student accountability, and student feedback to promote positive outcomes.
    2. Serving as a positive role model and mentor for colleagues, students, and staff that includes support of the commitment of both the University and Pitt Dental Medicine to foster a respectful, creative, and collaborative environment that embodies acceptance and respect for dimensions of race, ethnicity, gender, sexual orientation, gender identity, socio-economic status, age, physical abilities, religious beliefs, and political perspectives.
    3. Contribution in a positive manner to the tripartite mission of the School as it relates to teaching and pedagogy.
    4. Provide supportive description for the above.
- b. Department chairs provide an assessment for each of the categories above and additional description in support of their assessment.
- c. The Dean and Senior Associate Dean independently review each faculty member's annual evaluation form (reflection, self-assessment and their chair's assessment). Their review is a high-level review for completeness, concerns, culture of faculty support, meeting specified balance in responsibilities and expectations, and identifying faculty for promotion. The expectation is that any teaching related issues have been discussed and resolved at the chair level. Intervention happens at the Dean's level only if the former did not happen, there were unresolved disagreement with the review, and/or faculty or departments have not met curricular needs.

## **3. Celebration of Teaching Related Achievements**

- a. Awards, grants and other recognition of teaching innovation and excellence are shared and distributed to the School's community through the following venues:
  - i. General Faculty Meeting
  - ii. School of Dental Medicine Monthly Newsletter
  - iii. Announcements
  - iv. School's Website
  - v. Social Media

## **4. Promotion's Dossier Teaching Component**

- a. The School's promotion policy and procedure guidelines require a teaching portfolio type component including the following items and evidence of teaching assessment describing the candidate's full accomplishments and contributions.
  - i. Summary of teaching responsibilities, contributions to a course and/or clinical program, mentoring dental hygiene students, pre-doctoral students, graduate students, and/or residents

- ii. Proficiency in teaching as evaluated by multi-pronged review of teaching (e.g. student, instructional design, and/or external peer review) and/or evidence of student learning outcomes
- iii. Teaching materials
- iv. Teaching philosophy statement (as specified for each track)
- v. Teaching portfolio (for Dental Educator Track only)
- vi. Contributions to development, organization and presentation of required courses and/or clinical program (as specified for each track)
- vii. Active participation in curriculum development activities at the departmental or School level (as specified for each track)
- viii. Continuing improvements of the faculty member's teaching as determined by teaching reviews and self-assessment (as specified for each track)
- ix. Awards and honors

#### **5. Faculty Input**

- a. The School's promotion policy and procedure guidelines and the annual faculty evaluation forms are reviewed on a regular basis. When revisions are needed, appropriate ad hoc committees and the Faculty Affairs Advisory Committee provide input and review changes.
- b. All faculty are asked to review the revisions and have the opportunity to discuss the changes and ask questions at the General Faculty Meeting.
- c. Faculty are asked to vote on the revised annual review forms and promotion and tenure procedures and guidelines.
- d. This year (2021), a new venue "Open Forum" was held for faculty to ask any questions regarding the annual evaluation forms and for the Schools' administration to raise awareness about the Provost's request to include and consider COVID-19 impacts on teaching, teaching content and mentoring in a diverse and inclusive environment, and bias in student feedback and various forms of teaching assessment.

## Assessment of Teaching in the Doctor of Dental Medicine (DMD)/Pre-Doctoral Professional Program

The following assessment types have been in place in the predoctoral program since 2008; see detailed description below.

- ✓ Student feedback: surveys or focus groups, monthly meetings with class representatives and the School's leadership, alumni survey, ADEA Senior Survey
- ✓ Instructional design review
- ✓ Content review
- ✓ Curriculum review
- ✓ Learning outcomes: course level, program level, external examinations (e.g. boards)

The review of assessment of teaching prompted minor modifications for consideration.

1. **Curriculum and Learning Experiences:** The Doctor of Dental Medicine (predoctoral DMD professional program), is a four-year program comprised of didactic courses, preclinical (simulation and laboratory) courses, and clinical experiences. Courses and learning experiences take place each term, including the summer term.
2. **Number of Students:** 80 to 86 per class; 80 students are accepted and matriculate into the predoctoral program each year; during the summer of the second year, an additional 5-7 advanced standing students (international students with a dental degree from their home country) are integrated into the program to complete the third and fourth years as a requirement for a U.S. DMD degree.
3. **Number of Faculty:** Approximately 180
4. **Assessment of Teaching:** Assessment of teaching in the predoctoral curriculum is primarily governed by the Systematic Course Evaluation Policy and Procedures overseen by the Office of Academic Affairs and the predoctoral Curriculum Committee. The policy has been in place since 2008 and is reviewed/revised on an ongoing basis. The Curriculum Committee requires comprehensive information on the effectiveness of all educational activities offered by the School of Dental Medicine faculty in the predoctoral program. In order to provide comprehensive assessment of educational offerings, multiple assessment methods are in place to compensate for the inadequacies that may be related to any one method. The Curriculum Committee supports the notion that student feedback, while an integral part of the assessment blend, should not be the only assessment tool. The Systematic Course Evaluation Policy therefore includes three prongs for assessment of predoctoral educational offerings: 1) student opinion of teaching survey, 2) peer content review, and 3) instructional design review. The schedule for review of courses and teaching is determined in collaboration with department chairs and course directors and is amenable to modifications if circumstances arise that make such a change necessary.
  - a. Student Feedback
    - i. *Course level surveys or focus groups:* Student opinion of teaching surveys are requested on a minimum two-year cycle for all courses. More frequent intervals may be requested by the individual course director, the department chair or the Office of Academic Affairs. The University's Office of Measurement and Evaluation of Teaching (OMET) administers the student opinion surveys each term for didactic and pre-clinical courses. Course directors retain the option of using other instruments or modes of gathering student feedback, such as focus groups or Canvas/Qualtrics surveys, in lieu of using the OMET instrument. New courses in the curriculum are scheduled to receive a survey in the first term in which they are offered; however, course directors may elect to gather feedback by another method as described above. Didactic and pre-clinical survey forms are approved by the Curriculum Committee and submitted to OMET for distribution to students each term. Course directors may add additional questions from a question bank developed by the School's faculty, the OMET general question bank, or may write their own questions. All student opinion survey results are made available to course directors by OMET and sent from the Office of Academic Affairs to department chairs for review each term. The course director and

department chair are encouraged to discuss these evaluations and determine if any modifications to the curriculum should be recommended to the Curriculum Committee. Recommendations are included on the department chair's end-of-term report to the Curriculum Committee for discussion.

- ii. *Monthly meetings with class representatives and the School's leadership:* The Dean and Associate Deans meet with the student leadership (class presidents, vice presidents, and national student leadership representative) on a monthly basis. These meetings provide an opportunity for students to give feedback to the leadership on any aspect of their education including teaching assessment.
  - iii. *Senior survey:* Each year, the graduating class is asked to provide feedback on several aspects of their education including how well prepared they feel in each discipline. The senior survey is conducted nationwide by the American Dental Education Association and results are shared with the schools.
  - iv. *Alumni survey:* Two years after graduation, graduates are asked to provide feedback on several aspects of their education including how well prepared they feel in each discipline. The survey is conducted by the School of Dental Medicine and the survey instrument is reviewed and revised periodically.
- b. Instructional Design and Teaching Review: Review of instructional design follows a 4-5 year cycle. Modifications to this schedule may be needed when a new course is offered, the design of a course changes significantly (e.g. in class lectures to online), a course director requests a review, or potential areas of need are identified through other prongs of the Systematic Course Evaluation policy. Course directors and their department chairs are notified that their course(s) are scheduled for instructional design review the term prior to that in which the course is offered. The Office of Academic Affairs contacts Pitt Dental Medicine's Office of Academic Career Advancement to coordinate the review process. The Director of the Office of Academic Career Advancement contacts the course director to arrange a meeting directly or with other instructional design specialists from the University Center for Teaching and Learning. Individualized plans for conducting the review are made between the course director and the instructional design specialist. Courses which are part of a series or taught by the same course director may be included together for one comprehensive review. The review includes, at a minimum, review of the syllabus and teaching observation. Additional optional components are review of materials posted on Canvas, review of OMET surveys or other student feedback, and review of test questions or other assessments of learning. Upon completion of the review, the instructional design specialist submits their review summary to the course director. Although the summary is confidential, course directors are asked to discuss reviews with their department chair in order to determine if any modifications to their course or course series need to be recommended to the Curriculum Committee (CC). Recommendations are included on the department chair's end-of-term report to the CC for discussion.

- c. Content Review: A complete peer review of course content occurs at the department level on a 4-5 year cycle for each School of Dental Medicine department. Departments are also encouraged to seek external peer review when available, which can fulfill the cycle requirement. Modifications to this schedule may be needed when new courses are offered or other prongs of the Systematic Course Evaluation policy identify potential areas of need. Upon completion of the review with faculty in the department, the department chair determines if any recommendations for modifications to the curriculum (content removal, additions, sequencing, etc.) should be made to the Curriculum Committee and submit their report to the Curriculum Committee chair and Office of Academic Affairs.
  - d. Curriculum Review: The predoctoral Curriculum Committee meets monthly and discusses any teaching and curriculum related topics. Department summary reports are requested from department chairs at the completion of each term about courses in the department in which one or more prongs of the Systematic Course Evaluation policy were conducted. Additionally, a minimum threshold on the student evaluation identified by the Office of Academic Affairs is monitored, indicating to the department chair that additional follow-up with the course director may be necessary. The department chair includes any recommended modifications to the courses or curriculum as a result of these reviews for discussion at the Curriculum Committee meetings. The Curriculum Committee chair shares a summary of assessment results with the committee. Departments may also be asked to share peer content review results in more detail at Curriculum Committee meetings or faculty retreats.
  - e. Learning Outcomes
    - i. *Course level*: Course level learning outcomes are reviewed by the course directors and the Student Progress Committee, which monitors overall student progress throughout the program.
    - ii. *Senior Case Presentation*: Senior students submit a clinical case as a written report and present it. A committee of faculty (2-3 members) assesses the student's written report and oral presentation. This serves as a capstone experience synthesizing clinical, biomedical and behavioral sciences learned over the four years.
    - iii. *Program level*: Program level learning outcomes, such as national board first-time pass rate (see below) and on-time graduation are monitored by the Office of Academic Affairs and the Curriculum Committee.
    - iv. *External examinations* (e.g. national and regional board licensure examinations). Most students complete the National Board Dental Examination (written examination) and the Commission on Dental Competency Assessments (clinical examination), although these are not required for graduation. Student learning outcomes are compared nationally and results are shared and reviewed by the Executive Committee and Curriculum Committee
- 5. Faculty Input**: The Systematic Course Evaluation Policy and Procedures and the OMET survey instruments are reviewed and revised on an ongoing basis by the Office of Academic Affairs. Input and review of the revisions is provided by the Office Academic Career Advancement and the Curriculum Committee. The Curriculum Committee also



solicits feedback on the proposed revisions from faculty and course directors in their departments. Revisions may be further modified once input is received. Revisions are ultimately approved by the Curriculum Committee.

**6. Plans for Modifications:**

- a. The use of midterm surveys has been highly encouraged in our School in order to facilitate changes and modifications in the teaching approach within the same semester and will be added to the Systematic Course Evaluation Policy as an option to the student feedback prong. Course directors will be able to meet the requirements by either conducting a midterm survey or the end-of-term survey.
- b. A new survey instrument for distribution by OMET has been created for implementation in the Summer of 2021. The survey instrument is significantly shorter to facilitate higher response rates from students. Feedback from faculty was incorporated into the final version and the strategies to increase response rate was presented to faculty at the Open Forum on the annual evaluation and teaching assessment.
- c. Between 2019-2021, the Office of Academic Affairs reviewed the process for calibration of assessment of students in the preclinical and clinical environments. The Office of Academic Affairs and the Office of Academic Career Advancement are currently working with and providing support to departments as they revise, develop, and implement their calibration process for faculty assessment of student learning.

**7. Dissemination of Pitt Dental Medicine Assessment of Teaching Practices**

- a. Heiko Spallek, Jean A O'Donnell, Young Im J Yoo. [Preparing Faculty Members for Significant Curricular Revisions in a School of Dental Medicine](#). Journal of Dental Education. 2010 Mar; 74(3):275-88.
- b. Melanie Reyes, Zsuzsa Horvath. Systematic Course Evaluation at the School of Dental Medicine. Presented at Teaching Partners, University Center for Teaching and Learning, University of Pittsburgh, March 23, 2018.

## Assessment of Teaching in the Associate of Science or Baccalaureate Degree in Dental Hygiene Program

The following assessment types have been in place in the Dental Hygiene Program since 1996; see detailed description below.

- ✓ Student feedback: surveys, regular meetings with class representatives for course review, alumni survey
- ✓ Departmental course review (instructional design and content review)
- ✓ Curriculum review
- ✓ Learning outcomes: course level, program level, external examinations (e.g. boards)
- ✓ Self-Assessment (in addition to the School level self-assessment described above)

The review of assessment of teaching prompted minor modifications for consideration.

1. **Curriculum and Learning Experiences:** The Dental Hygiene program is a two-year program and comprised of didactic courses, pre-clinical (simulation and laboratory) courses, and clinical experiences. Courses and learning experiences take place on yearly recurring basis.
2. **Number of Students:** 25-30 per class on average; up to 36 per class.
3. **Number of Faculty:** 10 within the Dental Hygiene program (7FT, 3PT) and 8 outside of the program.
4. **Assessment of Teaching**
  - a. Student Feedback
    - i. *Course level surveys:* Course directors are asked to provide 2 years of OMET evaluations for systematic course reviews.
    - ii. *Term meetings with class representatives:* A student representative attends the Dental Hygiene Curriculum Committee meeting to give feedback as part of the course review process once per term.
    - iii. *Exit interview:* Students give feedback on didactic, preclinical and clinical courses. The Dental Hygiene Curriculum Committee reviews the results of the student exit interview on a yearly basis. A course review(s) prior to the start of the next triennial cycle may be promoted if it is identified as being deficient based on exit interviews, board results, and/or high failure rate.
    - iv. *Graduate survey:* The Dental Hygiene Curriculum Committee reviews graduate survey results that indicate curriculum deficiencies.
    - v. *Alumni survey:* The Dental Hygiene Curriculum Committee reviews alumni survey results that indicate curriculum deficiencies.
  - b. Syllabus review: The program director and Dental Hygiene Curriculum Committee chair review course syllabi each term. Any course issues that need to be addressed are discussed with course directors. Unresolved issues are submitted to the Curriculum Committee.
  - c. Instructional Design and Content Review:
    - i. Internal Course Review: Dental Hygiene Program Systematic Course Evaluation Policy is periodically performed to satisfy the curriculum standards required for accreditation. The Curriculum Committee completes a comprehensive review of all courses that comprise the curriculum of the Dental Hygiene Program every three years based on the following information: syllabus, credit hours, competencies, grade distribution, tests/quizzes, sample PowerPoint lecture, board scores, if applicable, and office of measurement and evaluation of teaching (OMET) surveys. Along with the above documentation, the course director submits a completed Course Evaluation document (self-assessment) provided by the Curriculum Committee. When the Committee meets with a course director, concerns regarding content brought forth by either faculty or student members are discussed and resolved. Course directors implement recommended changes and resubmit their course materials to the Curriculum Committee within 90 days.
    - ii. Internal Course Review: After systematic course reviews, The Curriculum Committee recommends each course director to counsel with the

University Center for Teaching and Learning to revise course materials. Teaching and Learning consultants can help faculty review the following:

1. Measurable course objectives (learning outcomes) at the higher-level thinking skills.
2. Consistency with the identified program competencies.
3. Teaching methods/strategies/learning activities that correlate with the course objectives.
4. Student evaluation that correlates with course objectives and learning outcomes.
5. Class session objectives (learning outcomes), class session activities, and informal/formal assessment that lead to the accomplishment of the course objectives.

Course review suggestions are returned to the course director and to the committee chair. The course director implements changes. The chair of the Curriculum Committee requests submission of modified syllabus and material when indicated.

- d. Calibration of Faculty: The Dental Hygiene Clinical Evaluation Committee meets monthly to review students' clinical progress and calibrate on grading and methods of feedback on student performance. At the beginning of each term, clinical supervisors meet with faculty to review clinical requirements and grading rubrics for each clinical course.
- e. Curriculum Review: The Dental Hygiene Curriculum Committee meets at least once a term to review curriculum and individual courses and execute the programs' curriculum management plan, which includes an evaluation process with input from faculty, students, administration and other appropriate sources. The student representative on the Curriculum Committee reports student concerns for review. The Dental Hygiene Advisory Board members review suggestions for change.
- f. Learning Outcomes
  - i. *Course level*: Course level learning outcomes are monitored by the course directors and the Dental Hygiene Curriculum Committee.
  - ii. *Program level*: Program level learning outcomes are monitored by the Program Director and the Dental Hygiene Student Promotion Committee, which monitors overall student progress.
  - iii. *External examinations* (e.g. boards): The Dental Hygiene Curriculum Committee reviews the results of the National Dental Hygiene Board examination on a yearly basis, and evaluates any curriculum areas with scores below the national average. This may require the initiation of course review(s) prior to the start of the next triennial cycle.

## **5. Faculty Input**

- a. Dental Hygiene Faculty and School of Dental Medicine Faculty who teach in the Program are represented in the Curriculum Committee.

## **6. Plans for Modifications**

- a. The Curriculum Committee reviews the results of the Commission on Dental Competency Assessments examination on a yearly basis, and evaluate any curriculum areas related to sections with scores below the regional average.

## Assessment of Teaching in the Doctor of Philosophy (PhD) and Master of Science (MS) in Oral and Craniofacial Sciences Program

The following assessment types have been in place in the Oral and Craniofacial Sciences Graduate Program since its inception in 2012; see detailed description below.

- ✓ Student feedback
- ✓ Curriculum review
- ✓ Learning outcomes

The review of assessment of teaching prompted minor modifications for consideration and the expansion of the assessment of the mentoring component.

- 1. Curriculum and Learning Experiences:** The Oral and Craniofacial Sciences Graduate Program includes a two-year MS program and a four- to five-year PhD program. The programs are comprised of foundational core, track-specific, selective and elective courses offered within the Department of Oral and Craniofacial Sciences and by several other entities, such as other departments in the School of Dental Medicine, School of Medicine and other Pitt schools/units. The learning experience (program curriculum) includes didactic classes, regular journal clubs, mentored research and other mentored activities.
- 2. Number of Students:** 3-5 per cohort (PhD and MS combined)
- 3. Number of Faculty:** 7 faculty within the department and approximately 5 faculty outside of the department teaching in the core courses; additional faculty via elective selective and courses across the University.
- 4. Assessment of Teaching:**
  - a. Student Feedback
    - i. *Course level surveys or focus groups:* Student feedback is solicited by the unit or school offering the course (e.g. predoctoral and residency programs).
    - ii. *Alumni survey:* Informal tracking is conducted about graduates' placement and their professional development after graduation.
  - b. Curriculum Review: The Oral and Craniofacial Sciences Graduate Program Curriculum Committee reviews the program regularly and implements changes on an annual basis. This includes content review and responses to student feedback.
  - c. Assessment of Mentoring Component: A formal assessment process was initiated in AY 2019-20. A self-assessment of faculty mentors was introduced asking faculty to identify strengths and weaknesses and any specific training they would find helpful in their role as mentors.
  - d. Learning Outcomes
    - i. *Course level:* Course level learning outcomes are monitored by the course directors and the program directors.
    - ii. *Review of Progress report upon completion of the course work (MS and PhD):* Student progress is monitored by the Graduate Studies Committee, the student's advisor, and the Graduate Programs Administrator. The progress of all active graduate students is systematically reviewed by the faculty in each track early in the spring semester of the first year.
    - iii. *Program level:*

1. *Graduate Student Monthly Meeting* (PhD and MS): A monthly meeting for all students addresses questions or issues raised related to course work or progress in the program. This venue offers opportunity for feedback from students and a two-way communication between students and program directors.
2. *Master's Thesis* (MS only): Following satisfactory completion of the required course work, students complete the research requirement (thesis) for the MS degree. A written thesis is submitted for review and a thesis defense takes place before the degree is to be conferred.
3. *Written and oral comprehensive examination* (PhD): The examination takes place upon successful completion of the Core Curriculum. Students are formally approved by their comprehensive examination committees and thesis committees. After review by the full faculty, students receive a written response to their petitions from the Graduate Studies Committee. Students submit a written proposal in the format used for an NIH research grant and defend it during the oral examination. Faculty advisors notify the Graduate Studies Committee of their advisees' successful completion of the comprehensive examination.
4. *Dissertation proposal and defense* (PhD): Before actively pursuing dissertation research, students give an oral presentation of the intended project to their Dissertation Committee. Each student presents a formal colloquium to the department based on the dissertation research. Prior to the oral examination and defense of the dissertation, students prepare and present to their committee members a final version of the dissertation. The final oral examination in defense of the doctoral dissertation is conducted by the doctoral committee.
- iv. *External benchmarks*: Students are encouraged to submit poster abstracts, deliver conference presentations, present their work at the School of Dental Medicine Research Day, and submit publications to peer-reviewed journals (PhD and MS). Additionally, PhD students are expected to have one manuscript submitted to a peer-reviewed journal by the time of graduation.

**5. Faculty Input:**

- a. The Oral and Craniofacial Sciences Graduate Program Curriculum Committee is comprised of faculty who teach in the program. Changes related to any aspects of the program are discussed within the committee and at the monthly department meetings.

**6. Plans for Modifications:**

- a. Student feedback: Self-reflection on own progress and feedback on all courses will be added to the review of progress report at the end of the course work. Ongoing feedback on the program will be solicited through the annual tracking form. Red-flags will be discussed by faculty annually and reviewed in the Curriculum Committee.

- b. Alumni survey: Creating a systemic tracking and follow up with graduates was discussed.
- c. Assessment of Mentoring Component: Due to the low number of students in the program and the nature of close relationship between students and mentoring faculty, there were some concerns when student feedback was discussed. The program directors met with Joel Brady, Teaching Consultant at the University Center for Teaching and Learning and the Mentoring Academy, and with Lindsay Onufer, Teaching Consultant at the University Center for Teaching and Learning, to discuss ways to solicit student feedback (e.g. focus group or other methods) and to conduct an instructional design review of the mentoring component of the program (reviewing structure, resources, etc.).

## Assessment of Teaching in the Advanced Dental Education Programs

### Endodontics

The following assessment types are in place in the Advanced Dental Education Program in Endodontics; see detailed description below.

- ✓ Resident feedback
- ✓ Calibration of resident assessment
- ✓ Curriculum review
- ✓ Learning outcomes

The review of assessment of teaching prompted minor modifications for consideration.

1. **Curriculum and Learning Experiences**: The Advanced Dental Education Program in Endodontics is a two-year residency program based on an apprenticeship model and is comprised of core didactic courses (for all residents across the School and additional discipline specific seminars), ongoing journal club, pre-clinical experiences, and clinical experiences. Residents have the option to obtain a Masters in Dental Science degree.
2. **Number of Residents**: 4 per cohort
3. **Number of Faculty**: 12 faculty within the department and approximately 5 faculty outside of the department teaching within the School of Dental Medicine.
4. **Assessment of Teaching**:
  - a. Resident Feedback
    - i. *Ongoing Feedback*: Once a year, residents evaluate faculty's teaching anonymously in didactic and clinical experiences; comments and numerical scores are distributed to faculty.
    - ii. *Exit interview*: At the end of the 2<sup>nd</sup> year, the program director meets with all residents who provide feedback on their clinical and didactic learning experiences, instructional materials, instrumentation, and give suggestions for improvement.
    - iii. *Alumni survey*: Every 6-7 years, an alumni survey is conducted asking for feedback on the program.
  - b. Calibration of resident assessment: Using video tutorials as part of the accompanying online curriculum, faculty are calibrated on assessing residents' clinical work.

- c. Curriculum Review: The residency curriculum has been recently revised based on a new online curriculum that is organized around subject matter concepts. Teaching (format and structure) has been modified and adjusted to support the new curriculum and instructional materials. Additionally, the Department of Endodontics conducts ongoing curriculum and teaching reviews internally.
  - d. Learning Outcomes
    - i. *Course level*: Course level outcomes are monitored by the course directors and the program director.
    - ii. *Program level*:
      - 1. *Clinical learning outcomes*: All faculty assess residents' clinical progress using a rubric, which is tabulated and reviewed by the program director. This process provides a holistic assessment of clinical proficiency. The quantitative component is tabulated, and a report is generated periodically to monitor changes.
      - 2. *Biannual Meeting with Residents*: The program director provides feedback twice a year to residents on their progress in the program.
      - 3. *Oral Exam*: Residents take an oral exam with a panel of faculty twice per year, or four times total in the program.
      - 4. *Mock Board Examination*: Residents take a mock examination in their second year to prepare them for the national exam by the American Board of Endodontics.
    - iii. *External examinations* (e.g. national boards, diplomacy):
      - 1. Residents take the American Board of Endodontics Part I examination in the second year of the program on didactic materials. Results are ranked and compared across other programs nationwide.
5. **Faculty Input**: The departmental Curriculum Committee reviews and discusses the courses and the program on an ongoing basis. Feedback from part-time faculty is solicited regularly.
6. **Plans for Modifications**:
- a. In this academic year (2020-21), a new type of feedback will be implemented. The program director will evaluate faculty's teaching in the program on an annual basis using the mechanism of the new online curriculum software.
  - b. Plans have been made for faculty to give feedback and evaluate the program director annually.
  - c. A periodic (every 4-5 years) instructional design review conducted by the Office of Academic Career Advancement has been discussed for implementation to review the program and resources, and provide feedback from a teaching standpoint.

## Orthodontics and Dentofacial Orthopedics

The following assessment types are in place in the Advanced Dental Education Program in Orthodontics; see detailed description below.

- ✓ Resident feedback
- ✓ Curriculum review
- ✓ Learning outcomes

The review of assessment of teaching prompted minor modifications for consideration.

1. **Curriculum and Learning Experiences:** The Advanced Dental Education Program in Orthodontics is a three-year residency program based on an apprenticeship model and is comprised of core didactic courses (for all residents across the School and additional discipline specific seminars), ongoing journal club and case presentations, pre-clinical experiences, and clinical experiences. Residents have the option to obtain a Masters in Dental Science.
2. **Number of Residents:** 3-4 per cohort
3. **Number of Faculty:** 7 faculty within the department and approximately 6-7 faculty outside of the department teaching within the School of Dental Medicine.
4. **Assessment of Teaching:**
  - a. Resident Feedback
    - i. *Alumni survey:* Every accreditation cycle, an alumni survey is conducted asking for feedback on the program.
  - b. Curriculum Review: Residency Education Committee and department meetings are held on a regular basis. Periodic review and discussion of programmatic issues, program outcome measures and benchmarks are undertaken. Appropriate programmatic improvements are considered and implemented.
  - c. Learning Outcomes
    - i. *Course level:* Course level outcomes are monitored by the course directors. The Core Curriculum provides a near-term benchmark for academic achievement within a five week period of study.
    - ii. *Program level:*
      1. Assessment of Clinical Learning: Clinical performance of each resident is formally evaluated three times each year utilizing individualized feedback in a standardized, systematic manner which allows both the residents and the program director to monitor the resident's progress and provide a basis for reinforcement or constructive change.
      2. Review of Residents' Progress: At the end of each term, clinical attending faculty complete an evaluation of each resident's clinical performance. The Program Director reviews each resident's cumulative evaluation and discusses specific faculty concerns with each resident as well as presenting each resident's cumulative evaluation to them for their review.
      3. Final Clinical Proficiency Progress Evaluation: During the third year of study, at the end of each academic term, the residents present case reports that involve the comprehensive analysis of completed or in-progress cases that have been under their supervision for treatment. The Peer Assessment Rating Index is used as a valid and reliable measure of treatment change and the peer-assessed quality therein. In combination with the resident's



Spring Term Clinical Proficiency Progress Evaluation, these two assessment tools serve well the need for summative assessment for each of the residents at the planned conclusion of their course of education.

iii. *External examinations* (e.g. national boards, diplomacy):

1. American Board of Orthodontics Written Examination: This is a comprehensive exam that assesses the resident's knowledge of basic sciences and clinical concepts based on criterion-referenced testing methods. The results of the examination are shared with the Program Director after each exam, and the Program Director discusses each resident's results with them in a direct, one-on-one session in concert with the Spring Term Clinical Proficiency Progress Evaluation.
2. Certification by the American Board of Orthodontics: The Program Director and Faculty prepare the residents to pursue certification by the American Board of Orthodontics (ABO). The ABO Written Examination is taken in partial fulfillment of the requirements for graduation.
5. **Faculty Input**: A Residency Education Committee and department meetings are dedicated to discussing curricular issues in the residency program. All full-time and part-time orthodontics faculty provide input into the program.
6. **Plans for Modifications**: A periodic (every 4-5 years) instructional design review conducted by the University Center for Teaching and Learning has been discussed for possible implementation to review the program and resources, and provide feedback from a teaching standpoint.

## Pediatric Dentistry

The following assessment types are in place in the Advanced Dental Education Program in Pediatric Dentistry; see detailed description below.

- ✓ Resident feedback
- ✓ Curriculum review
- ✓ Learning outcomes

The review of assessment of teaching prompted minor modifications for consideration.

1. **Curriculum and Learning Experiences**: The Advanced Dental Education Program in Pediatric Dentistry is a two-year residency program based on an apprenticeship model and is comprised of core didactic courses (for all residents across the School and additional discipline specific seminars), ongoing journal club, pre-clinical experiences, and clinical experiences. Residents have the option to obtain a Masters in Dental Science degree.
2. **Number of Residents**: 2 per cohort
3. **Number of Faculty**: 10 faculty within the department and approximately 12 faculty outside of the department teaching within the School of Dental Medicine.

#### 4. **Assessment of Teaching:**

##### a. Resident Feedback

- i. *Annual evaluation*: Residents provide feedback on faculty's clinical teaching annually.
- ii. *Exit interview*: Residents provide feedback on their didactic and clinical learning experiences at the end of the program.
- i. *Alumni survey*: Five years after graduation, graduates are asked to provide feedback on several aspects of their education (content areas and skills) and suggestions for improvement.

##### b. Curriculum Review: Curricular and teaching related issues in the residency program are reviewed and discussed within the department on a regular basis. The program director fulfills two national roles as a member of the Qualifying Exam Committee and Oral Clinical Exam Evaluator. This prestigious national exposure and involvement facilitate ongoing review of the curriculum review and maintaining current relevance.

##### c. Learning Outcomes

- i. *Course level*: Written examination is used to assess course level outcomes, which are monitored by the course directors and the program director.
- ii. *Program level*:
  1. *Clinical Evaluations*: All faculty evaluate residents' clinical progress every semester.
  2. *Mock board examinations*: Residents take two mock oral examinations in preparation for their diplomacy in pediatric dentistry.
- iii. *External examinations* (e.g. national boards, diplomacy):
  1. *In-Service Examinations*: Residents take two standardized national in-service examinations when they enter the program and at the end of the program. Scores are compared nationally and shared with the School.
  2. *Qualifying Exam, American Board of Pediatric Dentistry*: Prior to graduation, residents take a national qualifying exam to begin the process toward board certification. The scores are compared nationwide, and the School receives the reports.
  3. *Oral Clinical Exam, American Board of Pediatric Dentistry*: the following year after successful completion of the Qualifying Exam, the pediatric dental graduates take the oral exam. Upon successful completion of this exam, the candidate will become board certified. The School will be notified of the certification; however, the scores are not shared with the schools.

#### 5. **Faculty Input**: Full-time faculty review and discuss the courses and the program on an ongoing basis. Feedback from part-time faculty is solicited regularly.

#### 6. **Plans for Modifications:**

- a. Calibration of part-time faculty for assessing residents' clinical progress is currently in planning.
- b. A periodic (every 4-5 years) instructional design review conducted by the University Center for Teaching and Learning has been discussed for

implementation this summer to review the program and resources, and provide feedback from a teaching standpoint.

## Periodontics

The following assessment types are in place in the Advanced Dental Education Program in Periodontics; see detailed description below.

- ✓ Resident feedback
- ✓ Curriculum review
- ✓ Learning outcomes

The review of assessment of teaching prompted minor modifications for consideration.

- 1. Curriculum and Learning Experiences:** The Advanced Dental Education Program in Periodontics is a three-year residency program based on an apprenticeship model and is comprised of core didactic courses (for all residents across the School and additional discipline specific seminars), ongoing journal club and case presentations, pre-clinical experiences, and clinical experiences. Residents have the option to obtain a Masters in Dental Science degree.
- 2. Number of Residents:** 3 per cohort
- 3. Number of Faculty:** 10 faculty within the department and approximately 10 faculty outside of the department teaching within the School of Dental Medicine; a few additional faculty in other unit across the University.
- 4. Assessment of Teaching:**
  - a. Resident Feedback
    - i. *Biannual Feedback on Faculty:* Residents provide feedback twice a year on faculty's teaching in didactic courses and clinical learning experiences.
    - ii. *Exit interview:* At the end of the program, residents provide feedback on clinical and didactic learning experiences, instructional materials, instrumentation, and give suggestions for improvement.
    - iii. *Alumni survey:* Every 4-5 years an alumni survey is conducted asking for feedback on the program.
  - b. Curriculum Review: A standing meeting within the department is dedicated to discuss curricular and teaching related issues in the residency program on a regular basis.
  - c. Learning Outcomes
    - i. *Course level:* Course level outcomes are monitored by the course directors and the program director.
    - ii. *Program level:*
      1. *Clinical Competency:* Residents are required to pass clinical benchmarks prior to starting their clinical learning experiences.
      2. *Case Based Examination:* This internal exam prepares residents for the American Board of Periodontology Exam.
    - iii. *External examinations* (e.g. national boards, diplomacy):
      1. *American Academy of Periodontics (AAP) In-Service Exam:* Residents take a national closed-book benchmark examination in clinical and biomedical sciences annually. The School receives the

results from AAP, which are compared nationally to other programs that are also using the closed-book examination type.

2. *American Board of Periodontology Exam*: At the end of the program, residents take the national board exam.

**5. Faculty Input:**

- a. A departmental regular standing meeting is dedicated to discussing curricular and teaching related issues in the residency program. All full-time periodontic faculty teaching in the program participate in these meetings and provide input into the program.

**6. Plans for Modifications:**

- a. A periodic (every 4-5 years) instructional design review conducted by the University Center for Teaching and Learning has been discussed for implementation to review the program and resources and to provide feedback from a teaching standpoint.

## Prosthodontics

The following assessment types are in place in the Advanced Dental Education Program in Prosthodontics; see detailed description below.

- ✓ Resident feedback
- ✓ Curriculum review
- ✓ Learning outcomes

The review of assessment of teaching prompted minor modifications for consideration.

1. **Curriculum and Learning Experiences:** The Advanced Dental Education Program in Prosthodontics is a three-year residency program based on an apprenticeship model and is comprised of core didactic courses (for all residents across the School and additional discipline specific seminars), ongoing journal club, pre-clinical experiences, and clinical experiences. Residents have the option to obtain a Masters in Dental Science degree.
2. **Number of Residents:** 3 per cohort
3. **Number of Faculty:** 14 faculty within the department and approximately 3 faculty outside of the department teaching within the School of Dental Medicine.
4. **Assessment of Teaching:**
  - a. Resident Feedback
    - i. *Biannual Meeting with Residents*: The program director solicits feedback and suggestions for improvement from the residents on their experience with faculty in the clinic during their biannual meeting.
  - b. Curriculum Review: The curriculum is reviewed on an ongoing basis internally and has been revised and expanded in the past two years.
  - c. Learning Outcomes
    - i. *Course level*: Course level outcomes are monitored by the course directors and the program director.
    - ii. *Program level*:
      1. *Annual Meeting with Residents*: Each faculty provides feedback once a year to residents on their progress in the program. One of

the full-time faculty members reviews the feedback with the residents.

2. *Biannual Meeting with Residents*: The program director provides feedback twice a year to residents on their progress in the program.
  - iii. *External examinations* (e.g. national boards, diplomacy):
    1. *Mock Board Examination*: Residents take a mandatory mock examination every year to prepare them for the exam by the American College of Prosthodontics. Results are ranked and compared across other programs nationwide.
    2. *Board Certification*: At the end of the program, residents have the option to take a national written certification exam.
- 5. Faculty Input:** The program director and full-time faculty review and discusses the courses and the program on an ongoing basis.
- 6. Plans for Modifications:**
- a. A periodic (every 4-5 years) instructional design review conducted by the University Center for Teaching and Learning has been discussed for implementation in the fall term to review the program and resources, and provide feedback from a teaching standpoint.
  - b. A survey instrument will be developed for residents to evaluate faculty's clinical teaching for implementation in the summer term.
  - c. Exit interviews with graduation resident will be implemented this academic year.