

associations and attend and/or present at local, regional, and national conferences. Content at these conferences directly relate to trends in dental hygiene education; and participation in these activities is essential in the curriculum review process.

Strong liaisons have been developed with local and state dental/dental hygiene associations. These liaisons combined with a strong advisory committee also impact the dental hygiene curriculum. In addition, graduate and employer surveys are evaluated for potential curricular revision.

* Note: Every department is required to review Master Syllabi and Program Learning Outcomes a minimum of every two years.

II. Program Learning Outcomes: A description of what you intend for students to know (cognitive), think/feel (affective), or do (psychomotor), when they have completed your degree program. A suggested manageable number of outcomes should be in the range of five to ten. Describe Program Learning Outcomes review activities*.

Program Learning Outcomes review occurs concurrently with curriculum review.

An entry-level graduate with an Associate of Applied Science Degree in Dental Hygiene from Sinclair Community College will be able to:

Learning Outcomes	Related Courses
1. Demonstrate competencies of assessment, planning, implementation, and evaluation in the provision of current and comprehensive oral health care services in a variety of clinical and community settings.	ALH 104, 220; BIO 107, 205; CHE 122; COM 211, DEH 103, 105, 106, 111, 112, 113, 125, 135, 155, 156, 157, 210, 211, 212, 213, 215, 220, 235, 236, 250, 253, 255
2. Apply knowledge of infection control in the maintenance of client care facilities following the regulatory standards and requirements established by OSHA and other federal, state, and local agencies.	ALH 220; BIO 107, 205; COM 211; DEH 105, 111, 112, 113, 125, 135, 155, 156, 157, 210, 211, 212, 213, 220, 250, 253, 255

Learning Outcomes	Related Courses
3. Demonstrate the ability to effectively communicate a wide range of information with clients, healthcare providers, and the public regarding preventive, therapeutic, and educational information.	DEH 105, 106,111, 112, 113, 156, 157, 211, 212, 213, 235, 236, 255; PSY 119; ENG 111, 112; COM 211
4. Develop an understanding and appreciation for a diverse society in the design and provision of oral healthcare services and in the development and function of multiprofessional teams.	ALH 104; DEH 105,106,156, 157, 211, 212, 213, 235, 236; 255, ENG 111, 112; PSY 119; COM 211; SOC 111; HUMANITIES
5. Demonstrate a wide range of technological competencies including equipment use and care, research, data management and presentation.	ALH 104; DEH 105,106, 111, 112, 113, 125, 156, 157, 211, 212, 213, 235, 236, 253; 255, COM 211

III. Assessment Method(s): A measurable indicator of success in attaining the stated learning outcome(s). The methodology should be both reliable and valid. Please describe in detail.

- a. Formative Assessment Method(s) and Description: a measurable indicator of student in-progress success in attaining the stated learning outcome(s).

The dental hygiene department provides students with an optional dental hygiene board review. These sessions cover content categories that appear on the board and are very well attended. The review is usually scheduled for ten one-hour sessions. Faculty members volunteer to conduct each session. This allows students to self-assess their level of preparation.

Mock boards are administered four to six weeks prior to the Dental Hygiene National Board Examination. These experiences serve as a highly reliable predictor of student performance. Areas of weakness can be identified for the development of a remediation plan prior to the actual exam.

Dental hygiene students are required to enroll in two pre-clinical and four clinical courses that are skill building and competency based. Formative assessment occurs during each clinical session and is based on specific evaluation criteria. Every clinical course is composed of both lecture (didactic) and a laboratory (patient simulation) or clinical (human patient) component to ensure that competency is achieved. Students must successfully pass all instrumentation competencies prior to entering first quarter clinic.

The student to faculty ratio in each clinical session is 5 to 1. Students must achieve a competency level of 80% or higher in each clinical course and a competency level of 70% or higher in all non-clinical DEH courses.

CAPs (Corrective Action Plans) are developed for students who are not meeting the required competency level for any clinical/lab procedure. This need is determined by daily formative assessment that occurs during all clinicals and labs. Faculty and students are involved in remediation plan development and implementation.

Quizzes and written examinations are used in the didactic portions of the DEH courses to assess and monitor student progress. Questions that closely simulate board exams are included in all written testing. In addition, numerous practical experiences provide the hands-on opportunities for the application of the didactic content in clinical and community settings. Discussion group participation, case studies, oral presentations, group projects, and formal research papers are also required of DEH students.

Students use poster and table clinic presentations to demonstrate the results of their formal research topics. Presentations are articulated at business meetings with dental hygiene and dental professionals within the field, and at state and local

professional competitions. In addition, students also provide presentations to other allied health professionals in “peer to peer” educational opportunities. Sinclair DEH students have an exemplary reputation for receiving high awards and honors at the annual state competition. Students also use their materials as means to communicate research findings to the college community through a bulletin board display on the third floor atrium of building 4.

The dental hygiene department has incorporated the General Education checklists as a routine part of formative and summative assessment.

- b. **Summative Assessment Method(s) and Description:** a measurable indicator of end-of-program success in attaining the stated program learning outcomes(s).

Students must complete qualitative (competencies) and quantitative clinical requirements prior to program completion in addition to the overall curriculum requirements. Final exams, practicals, mock exams, research papers, case-study presentations, group projects, service-learning projects, etc. are examples of the summative evaluation process that occurs.

Results of the National Dental Hygiene Board Examination are received by the DEH department and used to measure student progress. Students must receive a percentile score of 75 or higher to pass the exam. Historically, NDHB scores highly correlate with summative assessment findings. This includes individual as well as cohort composite scores. Results are also used as part of the annual curriculum review process in the consideration of course/program revisions.

To practice in the state of Ohio, students must also take the Northeast Regional Board Dental Examination. This exam is composed of a computer simulated exam and a human subject clinical exam (SCC is a testing site). Students must achieve a competency level of 75% or higher to pass. Results of the practical/clinical examinations are also received by the DEH Department and are used in the curriculum review process.

Also, DEH students take the Ohio State Dental Law Examination. This test is administered to students during their last quarter of the curriculum. Students must achieve a 75% competency level or higher.

- IV. **Results:** A description of the actual results of overall student performance gathered from the summative assessment(s). (see II.b.)

- National Dental Hygiene Board Examination – 100% pass
- Northeast Regional Board Examination – 100% pass
- Ohio State Law Test – 100% pass

Feedback received from employers is excellent. There is currently a high demand for dental hygienists in the Dayton and surrounding areas. Student placement rates remain at 100%. Entry-level dental hygienists can expect very attractive salary and benefit packages as a result of the current need. Due to SCC's reputation for a quality dental hygiene educational program and low tuition, many students commute from outside the Montgomery County area including Columbus, Cincinnati, and Indiana.

The Advisory Committee consists of representatives from the Dayton Dental Hygienists' Association; the Dayton Dental Society; The Gem City Pharmaceutical, Medical, Dental Group; program faculty; program alumni; Allied Health counselors; and the Dean of Allied Health. This committee serves an invaluable function by providing the program direction, advice, and information on a regular basis. The chairperson of the advisory committee, Ann Naber, is currently the immediate past president of the American Dental Hygienists' Association. We are fortunate to have her guidance and expertise.

The dental hygiene department admits 35 students into the first year of the program. Traditionally, attrition statistics demonstrate approximately a 30-33% loss of students by the end of the first year. This loss has been due to academic failure, personal problems, financial problems, unrealistic expectations, etc. The department has been involved in initiatives to increase student retention utilizing various strategies that include flexible course offerings; mentoring; the establishment of learning communities; and collaborative recruitment initiatives with local associations. The attrition rate continues to fluctuate from 20-33%. Unfortunately, some students who meet admissions criteria are not prepared for the academic rigor and time commitment required in the dental hygiene program.

- V. **Analysis/Actions:** From analysis of your summative assessment results, do you plan to or have you made any adjustments to your program learning outcomes, methodologies, curriculum, etc.? If yes, describe. If no, explain.

The DEH Department Curriculum Committee reviews the curriculum on an annual basis and has developed a curriculum management plan to guide the process. Results of the most recent reviews include:

- Developed renovation plans for program expansion including a patient simulation lab, extended dental hygiene clinic and dental radiology lab.
- Drafted curricular revisions to revise the scope and sequence of the dental hygiene curriculum.
- Incorporated case-study development project in DEH 212/250.
- Provided HIPAA training for faculty, staff, and students including clinical protocols.

Future plans include:

- Expand and renovation of dental hygiene facilities.
- Draft a certificate program in *Dental Assisting*.
- Revise clinical evaluation system to reflect competency-based focus.
- Implement curricular revisions.

VI. General Education: Are you using any tool(s) to assess any of the three primary general education outcomes * (communication, thinking, values/citizenship)? If so, describe.

DEH is currently using the writing and oral communication checklist in many courses and plans to incorporate the critical thinking checklist as well. Each student participates in case-study development with actual and simulated patients, prepares both oral and written reports, and presents to their cohort groups and the faculty.

- a. Where within the major do you assess written communication? Describe the assessment method(s) used. Describe the assessment results if available.

Writing skills are reinforced throughout the curriculum with abstracts and research papers required in many DEH courses. In addition, project proposals, treatment plans, case studies, and grant-writing assignments are required and are an integral part of the dental hygiene curriculum.

- b. Where within the major do you assess oral communication? Describe the assessment method(s) used. Describe the assessment results if available.

Oral skills are reinforced and assessed through such activities as table clinics and poster presentations; video taped presentations by students; oral presentations; communication and oral/nutritional health counseling with patients; participation in community health events and service-learning assignments; oral examinations; and in professional association activities.

* Note: The oral communication checklist and the written communication checklist developed by the General Education Committee were adopted for college-wide use during the

1997-1998 academic year by Academic Council. Thinking Guidelines developed by the General Education Committee are being piloted by faculty during the 1998-1999 academic year.

- c. Where within the major do you assess thinking? Thinking might include inventing new problems, seeing relationships and/or implications, respecting other approaches, demonstrating clarity and/or integrity, or recognizing assumptions. Describe the assessment method(s) used. Describe assessment results if available.

The development of critical thinking skills is an integral component of the dental hygiene curriculum. The Dental Hygiene National Board Examination has incorporated case-based questions that require application of knowledge and critical thinking abilities. Students routinely individualize therapy based on patient needs, compliance, etc. Case studies that include varied ethical, social, clinical, etc. implications are used throughout the program. Faculty members routinely utilize coaching techniques to assist students in the development of critical thinking skills.

- d. Where within the major do you assess values/citizenship/community? These activities might include behaviors, perspective, awareness, responsibility, teamwork, ethical/professional standards, service-learning or community participation. Describe the assessment method(s) used. Describe assessment results if available.

The American Dental Hygienists' Association Code of Ethics has been incorporated in the introduction course using cases to address various topics including professionalism. This code is utilized throughout the curriculum to guide students and faculty in ethical decision-making.

Service-learning has become a significant component of the DEH curriculum. Mrs. Sheranita Hemphill has incorporated many opportunities in her community dental health courses (DEH 235 and 236) that have involved students in various learning experiences in the Dayton community. Students design and implement projects with the Dayton City Schools and numerous other community agencies.

VII. Recommendations/Comments: