

# CNM ANNUAL STUDENT LEARNING ASSESSMENT REPORT

*Due to the Student Academic Assessment Committee by October 15*



## PART 1: REPORT INFORMATION

Report Year and Contact Information			
<u>2017-2018</u> Academic Year	<u>Melanie Upshaw</u> Contact Person	<u>mupshaw@cnm.edu</u> CNM Email	<u>50178</u> CNM Office Extension
Subject of this Report			
HWPS--DA_CERT--Dental Assisting Certificate			

## PART 2: CONTEXT IN WHICH THE ASSESSMENT TOOK PLACE

Program/Area Highlights and Successes
<p>(Wherever applicable, include course completion rates, job placement outcomes, and licensing examination pass rates. See the program information dashboard at <a href="https://livecnm.sharepoint.com/sites/Dashboards/SitePages/Program%20Information%20Dashboard.aspx">https://livecnm.sharepoint.com/sites/Dashboards/SitePages/Program%20Information%20Dashboard.aspx</a> (access restricted to CNM employees) and other reports at <a href="https://www.cnm.edu/depts/opie">https://www.cnm.edu/depts/opie</a>.)</p> <ul style="list-style-type: none"><li>A. Positive developments: All of our graduating class for Summer 2018 were offered jobs by our clinical sites. We have added 5 new dental affiliation agreements for clinical sites. The college has built a new facility for the dental science programs and equipped it with state of the art technology and equipment.</li><li>B. Retention Rates: December 2017 cohort was 73% (with two returning in the next cohort). August 2018 cohort was 83% (with one student finishing in the next cohort).</li><li>C. Graduate Outcomes: Only 2016-2017 data available on the website. No data was available for 2017-2018.</li><li>D. Credentialing Exam Outcomes: There are 3 components to the Dental Assisting National Board (DANB); radiology (RHS), infection control (ICE) and general chairside (GS). Dec 2017- 9 of 11 graduates took the DANB. 7 passed all 3 components-2 failed one or more components. All 9 passed the RHS component. Aug 2018- 11 of 14 students took the exam. 9 passed- 2 failed. All 11 passed the RHS.</li></ul>

Changes Implemented During the Past Year in Support of Student Learning
Last report discussed implementation of a specific software called Adaptive Quizzing (AQ) which is purchased through the textbook publisher. Students are meeting expectation of: Level 2 Mastery in all categories assigned. This AQ supports student learning by allowing students more time with the content, enhances their test taking skills and allow them more time to review feedback. It allows faculty more classroom teaching time since students do AQ outside of

the class. In addition, radiographic sensors were implemented and have delivered a realistic preparation for the students using the technology and increasing the speed of receptor processing. Sensors are used more in the current industry than film base or PSP. September 2018, we moved our program to the JMMC campus where a new laboratory was built specifically for dental. Students are using new radiographic technology and dental equipment. There is a separate classroom within our lab to provide additional instruction prior to performing skills, a separate dental materials lab, a sterilization area and panoramic radiographic machine; which will support and enhance the students' preparation for working in a dental office/clinic. The new facility has 8 operatories which allows us to work with more students in labs.

The new campus has student support services which were not provided at WTC that we believe will help them be successful as students.

### PART 3: REPORT ON ASSESSMENT OF STUDENT LEARNING

Assessment Method	Type of Assessment Tool	Population or Course(s) Assessed	Graduate Learning Outcome(s) Assessed	Mastery Level (E.g., "Minimum score of 3 on a rubric scaled 0-4" or "Minimum score of 75%")	Targeted % Achieving Mastery	Outcome
Final Comprehensive Theory Exam	Direct & Internal	DA 1517 Dental Radiology II	Interpret and evaluate radiographs, implement quality assurance procedures and radiology regulations, applying the principals of radiation safety for patients and operators and practice infection control standards for equipment, patients and operators.	Target: Students will pass with a 71%	64%	Target partially met
DANB Radiation Health and Safety (RHS)	Direct & External	Graduates: National Exam (DANB)	Interpret and evaluate radiographs, implement quality assurance procedures and radiology regulations, applying the principals of radiation safety for patients and operators and practice infection control standards for equipment, patients and operators.	Target: 71% of graduates will secure state licensure in radiology to work in the industry	95%	Target met

HESI Examination on Radiation Health and Safety (RHS)	Direct & External	DA 2510 DANB Preparation	Interpret and evaluate radiographs, implement quality assurance procedures and radiology regulations, applying the principals of radiation safety for patients and operators and practice infection control standards for equipment, patients and operators.	Target: Students will pass with a 71%	76%	Target met
DANB General Chairside (GC)	Direct & External	Graduates: National Board Exam (DANB)	Collect and record clinical data, perform chairside procedures, utilize appropriate chairside assistant ergonomics, prepare, manipulate and apply chairside dental materials, demonstrate an understanding of laboratory procedures and materials, describe patient education and oral health management, provide pre- and post-operative instructions, discuss prevention and management of emergencies, and discuss office operations.	Target: Students will pass with a 71%	77%	Target partially met

HESI Examination on General Chairside(GC)	Direct & External	DA 2510 DANB Preparation	Collect and record clinical data, perform chairside procedures, utilize appropriate chairside assistant ergonomics, prepare, manipulate and apply chairside dental materials, demonstrate an understanding of laboratory procedures and materials, describe patient education and oral health management, provide pre- and post-operative instructions, discuss prevention and management of emergencies, and discuss office operations.	Target: Students will pass with a 71%	96%	Target met
DANB Infection Control Exam (ICE)	Direct & Internal	Graduates: National Board Exam (DANB)	Demonstrate an understanding of patient and dental healthcare worker education, apply standard/universal precautions and the prevention of disease transmission, demonstrate an understanding of occupational safety, manage infection and hazard control protocol consistent with published professional guidelines.	Target: Students will have a 71% average	95%	Target met

HESI ICE DA 2510 (infection control)	Direct & External	DA 2510 DANB Preparation	Demonstrate an understanding of patient and dental healthcare worker education, apply standard/universal precautions and the prevention of disease transmission, demonstrate an understanding of occupational safety, manage infection and hazard control protocol consistent with published professional guidelines.	Target: Students will pass with a 71%	80%	Target met
Clinical Behavior Rubric	Indirect & Internal	DA 2090 Dental Assisting Clinical Experience II	Exhibit behaviors expected to be successful in securing and maintaining a career in the dental profession to include: punctuality, teamwork, communication skills and appropriate interaction with patients of all ages and backgrounds, respect for personal beliefs without discrimination of patient care.	Target: Students will pass with a 75%	100%	Target met

Final Comprehensive Clinical Evaluation	Indirect & Internal	DA 2090 Dental Assisting Clinical Experience II	<p>Interpret and evaluate radiographs, implement quality assurance procedures and radiology regulations, applying the principals of radiation safety for patients and operators and practice infection control standards for equipment, patients and operators. Collect and record clinical data, perform chairside procedures, utilize appropriate chairside assistant ergonomics, prepare, manipulate and apply chairside dental materials, demonstrate an understanding of laboratory procedures and materials, describe patient education and oral health management, provide pre- and post-operative instructions, discuss prevention and management of emergencies, and discuss office operations. Demonstrate an understanding of patient and dental healthcare worker education, apply standard/universal precautions and the prevention of disease transmission, demonstrate an understanding of occupational safety, manage infection and hazard control protocol consistent with published professional guidelines.</p>	Target: Students will pass with a 71%	96%	Target met
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<p>Dental Assisting National Board Complete Exam for Certificate Dental Assistant (CDA)</p>	<p>Direct &amp; Internal</p>	<p>Dental Assisting National Board Exam (DANB CDA)</p>	<p>Interpret and evaluate radiographs, implement quality assurance procedures and radiology regulations, applying the principals of radiation safety for patients and operators and practice infection control standards for equipment, patients and operators. Collect and record clinical data, perform chairside procedures, utilize appropriate chairside assistant ergonomics, prepare, manipulate and apply chairside dental materials, demonstrate an understanding of laboratory procedures and materials, describe patient education and oral health management, provide pre- and post-operative instructions, discuss prevention and management of emergencies, and discuss office operations. Demonstrate an understanding of patient and dental healthcare worker education, apply standard/universal precautions and the prevention of disease transmission, demonstrate an understanding of occupational safety, manage infection and hazard control protocol consistent with published professional guidelines. A</p>	<p>Target: Students will pass with a 71%</p>	<p>72%</p>	<p>Target met</p>
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			combination of all of the above graduation learning outcomes.			
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Summary of Assessment Findings
<p>Results for DA 1517 Final Radiology II Exam was a 59 median average (Dec 2017) and a 77 median average (Aug 2018).</p> <p>Results from DANB RHS was 89% (Dec 2017) and 100% (Aug 2018) of applicants receiving licensure for radiology.</p> <p>Results from HESI RHS exam was (78% 2017) and 9% (Aug 2018).</p> <p>Results from DANB General Chairside was 70% (Dec 2017) and 82% (Aug 2018) of applicants pass the exam.</p> <p>Results from HESI General Chairside was 94% (Dec 2017) and 82% (Aug 2018).</p> <p>Results from DANB ICE was 100% (Dec 2017) and 91% (Aug 2018) of applicants passed the exam.</p> <p>Results from HESI ICE was 78% (Dec 2017) and 76% (Aug 2018) of applicants passed the exam.</p> <p>Clinical Behavior rubric showed average score of 98% (Dec 2017) and 95% (August 2018).</p> <p>Results for the Comprehensive Clinical Evaluation was a 96% (Dec 2017) and 98% (Aug 2018) median average.</p> <p>Results from the Dental Assisting National Board (DANB) for CDA pass rate for our students was 80% (Dec 2017) and 81% (Aug 2018).</p>

Interpretation of Assessment Findings
<p>Results for DA 1517 Final Radiology Exam we did not meet our criteria of 71% for our Dec 2017 cohort which was 59 median average, however we met our criteria of 71% with 77% median average for Aug 2018 cohort. Instructor of DA 1517 changed between the two cohorts. New teaching methodology was introduced incorporating additional textbook.</p> <p>Results from the RHS of the DANB exam 89% (Dec 2017) and 100% (Aug 2018) All candidates who passed, received licensure for radiology. Graduates met our criteria of 71%.</p> <p>Results from the RHS of the HESI exam pass rates were 87% (Dec 2017) and 79% (Aug 2018) Graduates met our criteria of 71%. Students in the August group used the remediation provided by HESI to review and prepare for National Board.</p> <p>Results from General Chairside DANB exam pass rate was 70% (Dec 2017) and 82% (Aug 2018). Graduates from Dec 2017 did not meet our criteria of 71%, however graduates from Aug 2018 did meet our 71% criteria. Methodology in August group incorporated more Adaptive Quizzing assignments than the December group.</p> <p>Results from General Chairside HESI exam was 94% pass rate (Dec 2017) and 100% pass rate (Aug 2018). Graduates from Dec 2017 and Aug 2018 did meet our 71% criteria.</p>



Results from DANB Infection Control Exam (ICE) was 100% pass rate (Dec 2017) and 91% pass rate (Aug 2018). Graduates from Dec 2017 and Aug 2018 did meet our 71% criteria.

Results from HESI Infection Control Exam (ICE) was 90% pass rate (Dec 2017) and 73% pass rate (Aug 2018). Graduates from Dec 2017 and Aug 2018 did meet our 71% criteria.

Professionalism rubric demonstrated students from both graduating classes were meeting expectations of the industry by scoring above 75%.

Results for the Comprehensive Clinical Evaluation were an 96% (Fall 2017) mean average and a 98% mean average for (Aug 2018) exceeding our 71% criteria.

Results from the Dental Assisting National Board (DANB) met our criteria of 71% pass rate for the CDA. The pass rate for graduating class of Dec 2017 was 80% and 81% for the graduating class of Aug 2018.

**Action Plan in Support of Student Learning** (Describe changes to be made that are based at least in part on the assessment interpretation. If the assessment did not yield useful information, describe changes to be made in the assessment methodology and/or criteria.)

The program started administering HESI for Dental Assistant (an external direct method of assessment) in the last term of the curriculum. The HESI exam is a summative assessment of all certification standards necessary to pass the National Board. It will prepare the students for the vigor of the national exam and provide feedback to both the student and the program on areas that needed to be reviewed by the student and strengthened in the program curriculum. This assessment is a useful determinant of the students pass rates. Students who have taken the HESI have stated it helped in their preparation for their National exam (DANB).

The assessment methods are currently summative and based mostly on comprehension and knowledge except for the final clinical evaluation. The program has determined it needs to incorporate a skill and application assessment in radiology. Currently students cannot take radiographs in their clinical rotation without assistance from a preceptor. It is difficult to measure their competency level in this area with the clinical assessment tool. The lab course, DA 1592, is a skill based lab. This course will be added as an assessment of radiographic technique because students take intraoral radiographs on both a mannequin and on live patients. They take extraoral radiographs on mannequins; both will assess their technique and be reflected in their final grade.

We will incorporate Adaptive quizzing into DA 1517 to see if it improves the final examination results and compare it to the HESI radiology.

Additionally, our clinical sites find that our students are weak in communications. We will evaluate the pre-requisite course, Communications 2221, to see if it is meeting our needs. If a change is necessary, it will be implemented in the next catalog cycle. To help immediately, we have moved the communication segment to DA 1519 and will add motivational interviewing. Our advisory board recommended role playing or live scenarios involving student actors.

The program has implemented some curricular revisions by changing the course sequencing of DA 2513 and DA 2593 to earlier in the program, to strengthen the students preparation for clinical rotation especially in DA 1590.

**Please select all of the following that characterize the types of changes described in the above action plan:**

Assessment criteria revision

Assessment methodology revision

Assignment revision

Budgetary reallocation

Change in teaching approach

Course content revision

Curricular Revision

Faculty training/development

Process revision

<b>Recommendations, Proposals, and/or Funding Requests</b>	<b>Budget Needed</b>

**PART 4: REMAINING YEARS IN CURRENT ASSESSMENT CYCLE PLAN** (including any revisions) – **OR -- UPCOMING ASSESSMENT CYCLE PLAN** (if this was the final year)

<b>Years of Full Cycle</b>	<b>Next Year's Assessment Focus</b> (Describe how the next planned assessment is expected to provide information that can be used toward improving student learning.)
Graduating class of Fall 2018 and Summer 2023	We will use Dental Assisting National Board (DANB) and HESI exams subcategories to reflect more accurate strengths and weaknesses of the program curriculum. Assessment will continue using the final clinical competency and professional rubric that is complete by a dentist at the student's clinical site during their last year of the program. We plan to test the theory that Adaptive quizzing better prepares the student for exams in DA 1517. We will reassess communications by evaluating how our presentation of communications earlier and more often in simulated situations improves student performance in the clinical competency.

Graduate Learning Outcomes to Be Assessed	Years in which Assessment Is Planned	Population/Courses to Be Assessed	Planned Assessment Approach
1. Expose and evaluate radiographs, implement quality assurance procedures and radiology regulations, applying the principals of radiation safety for patients and operators and practice infection control standards for equipment, patients and operators.	Dec 2018-2023	DA 1592 Final Grade National Board (DANB) DA 2510 HESI Examination	Summative Lab Final DA 1592 (Internal Direct) DANB RHS-Dental Assisting National Board (External Direct) HESI- computerized assessment (External Direct)
2. Collect and record clinical data, perform chairside procedures, utilize appropriate chairside assistant ergonomics, prepare, manipulate and apply chairside dental materials, demonstrate an understanding of laboratory procedures and materials, describe patient education and oral health management, provide pre- and postoperative instructions, discuss prevention and management of emergencies, and discuss office operations.	Dec 2018-2023	DA 2090 National Board (DANB) DA 2510 HESI Examination	Final Comprehensive Clinical Evaluation (Internal Direct and External Direct) DANB GCS-Dental Assisting National Board (External Direct) HESI- computerized assessment (External Direct)
3. Demonstrate an understanding of patient and dental healthcare worker education, apply standard/universal precautions and the prevention of disease transmission, demonstrate an understanding of occupational safety, manage infection and hazard control protocol consistent with published professional guidelines.	Dec 2018-2023	DA 2090 National Board (DANB) DA 2510 HESI Examination	Final Comprehensive Clinical Evaluation (Internal and External Direct) DANB ICE- Dental Assisting National Board HESI- computerized assessment (External Direct)
4. Exhibit behaviors expected to be successful in securing and maintaining a career in the dental profession to include: punctuality, teamwork, communication skills and appropriate interaction with patients of all ages and backgrounds, respect for personal beliefs without discrimination of patient care	Dec 2018-2023	DA 2090 DA 1590 DA 1592	Final Comprehensive Clinical Evaluation (Internal and External Direct) Clinical Behavior Rubric (Internal Direct) Oral Presentation Rubric (Internal Direct)

<p>5. Continual growth and development as a professional committed to the dental industry by participation in professional organizations and educational activities offered to dental auxiliaries while enrolled in the program. Obtaining certification as a professional by taking both national and state examinations immediately upon graduation.</p>	<p>Dec 2018-2023</p>	<p>National Board State Board</p>	<p>DANB (External Direct) State Licensing Board (External Direct)</p>
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