

AC 2019 – 2020 Assessment

Program – Veterinary Technology Program Associate Degree

College: Arts and Sciences

Prepared by: Brenda Woodard

Date: June 16, 2020

Approved by: Fran Lemoine

Date: June 29, 2020

Northwestern Mission: Northwestern State University is a responsive, student-oriented institution that is committed to the creation, dissemination, and acquisition of knowledge through teaching, research, and service. The University maintains as its highest priority excellence in teaching in graduate and undergraduate programs. Northwestern State University prepares its students to become productive members of society and promotes economic development and improvements in the quality of life of the citizens in its region.

College of Arts and Sciences Mission: College of Arts and Sciences' Mission. The College of Arts & Sciences, the largest college at Northwestern State University, is a diverse community of scholars, teachers, and students, working collaboratively to acquire, create, and disseminate knowledge through transformational, high-impact experiential learning practices, research, and service. The College strives to produce graduates who are productive members of society equipped with the capability to promote economic and social development and improve the overall quality of life in the region. The College provides an unequaled undergraduate education in the social and behavioral sciences, English, communication, journalism, media arts, biological and physical sciences, and the creative and performing arts, and at the graduate level in the creative and performing arts, English, TESOL, and Homeland Security. Uniquely, the College houses the Louisiana Scholars' College (the State's designated Honors College), the Louisiana Folklife Center, and the Creole Center, demonstrating its commitment to community service, research, and preservation of Louisiana's precious resources.

School of Biological and Physical Sciences Mission: The School of Biological and Physical Sciences will become a reputable leader in public higher education by providing a transformative science educational experience using innovative instructional methods and through the scholarly achievements of our faculty, staff, students, and alumni. The School serves and inspires the students of Northwestern State University and the public through the development of lifelong learners who are excited about science, are disciplined in analytical and critical thinking skills, and are socially, environmentally, and ethically responsible. The School delivers Associate degrees in Veterinary Technology, Bachelor of Science degrees in Biology (with concentrations in Biomedical, Clinical Laboratory Science, Forensic Science, Natural Science, and Veterinary Technology), Applied Microbiology (with concentrations in Environmental and Applied Microbiology and Medical and Health Profession), and Physical Sciences. The School also offers minors in Biology, Microbiology, Wildlife Management, and Chemistry.

AC 2019 – 2020 Assessment

Veterinary Technology Program Mission: The mission of the Northwestern State University of Louisiana Veterinary Technology Program is to prepare graduates who as veterinary technicians or technologists are clinically competent and who demonstrate:

- Excellent and compassionate patient care and services
- Excellent technical skills
- Professionalism and high ethical standards
- Promotion of public health
- Commitment to lifelong learning

Purpose: The Associate degree program in Veterinary Technology will prepare graduates to become *veterinary technicians* working in academia, animal research facilities, zoological parks, private industry, animal specialty veterinary practices, and general veterinary practices. Some graduates may further their education in attaining the Biology B.S. degree with the Veterinary Technology concentration, becoming veterinary technologists, and/or attending professional veterinary schools to become veterinarians. The program goal is to educate graduates who possess entry level technical skills and a knowledge base in all areas of veterinary medicine.

Methodology: The assessment process for the AD Veterinary Technology program is as follows:

- 1) Data from assessment tools (direct and indirect, quantitative and qualitative) are collected and returned to the program director.
- 2) The program director analyzes the data to determine if students met measurable outcomes.
- 3) Results from the assessment are discussed with the program faculty and technical staff.
- 4) Individual meetings are held with faculty/staff teaching core veterinary technology courses as required (show cause).
- 5) The program director, in consultation with the Veterinary Technology Program Advisory Committee, will propose changes to measurable outcomes, assessment tools for the next assessment period and, where needed, curricula and program changes. Substantive changes will be reported to the American Veterinary Medical Association Committee on Veterinary Technology Education and Activities (AVMA-CVTEA), the program's accrediting agency, within 60 days.

AC 2019 – 2020 Assessment

Student Learning Outcomes:

SLO 1. Students completing the first-year sequence of courses in Veterinary Technology will demonstrate required didactic knowledge base and will demonstrate required “hands-on” technical skills application which will be documented for each student.

Course Map: Tied to course syllabus objectives/outline.

VTEC 1030-1031: Introductory Veterinary Technology II Lecture/Laboratory (71 skills)

Measure 1.1. (Direct – Knowledge)

Students enrolled in VTEC 1030 will demonstrate proficiency in accrediting-agency (AVMA-CVTEA) required didactic skills/knowledge base following standard criteria for evaluating essential skills (document following). Eighty percent of students completing the course will be able to demonstrate a basic understanding by averaging 70% or higher scores on the examinations.

Finding. Target was met.

Assessment Year	Course	# Students Enrolled	# Students Scoring 70% avg. or higher on exams	Percent Students Meeting Measure
2018-2019	VTEC 1030	25	20	80%
2019-2020	VTEC 1030	44	37	84%

AC 2018-2019: 80% of students achieved 70% or higher exam scores.

AC 2019-2020: 84% of students achieved 70% or higher exam scores.

Analysis. In 2018-2019, the target was met. Based on the analysis of the 2018-2019 data, though the program target of 80% pass rate on exams was met, it was determined that further improvements in this outcome would depend on improving factors affecting students outside the classroom and outside the control of the program. The students (20%) not meeting the measure of proficiency had decreased study time because of other responsibilities or had learning disabilities which required that they spend more time preparing for the examinations or had disinterest in the profession. In 2019-2020, daily quizzes were implemented to encourage attendance and participation in learning. Individual student outcomes were monitored closely for early intervention with recommended study groups and/or tutoring or time spent with instructors during office hours, referral for individual counselling, and encouragement to spend the necessary time with the study material. Even after the course moved to online instruction secondary to COVID-19 restrictions, daily quizzes and early interventions were continued to the extent possible. As a result of these actions, the target percentage of students meeting the measure improved to 84%. This calculation included two students who dropped the

AC 2019 – 2020 Assessment

course in the early part of the semester. Therefore, 88% (37/42) of the students completing the course met the measure.

Decision. In AC 2019-2020, the target was met. Based on the analysis of the 2019-2020 results, the previously implemented improvements will be maintained. To measure a more complete student course performance, the target will be changed to reflect the measuring the percentage of enrolled students who complete the course with a final grade of 70% or better.

Measure 1.2. (Direct – Skill / Ability)

One hundred percent of students enrolled in VTEC 1031 will each demonstrate ability to complete 71 required technical skills following standard criteria established for each skill (document following) and faculty veterinarian or credentialed veterinary technician will document completion of demonstration of each skill for each student successfully completing the laboratory course.

Finding. Target was met.

Assessment Year	Course	# Students Enrolled	# Students Performing All Documented Skills	Percent Students Meeting Measure
2018-2019	VTEC 1031	24	24	100%
2019-2020	VTEC 1031	41	40	100%*

AC 2018-2019: 100% of students achieved 100% skills completion.

AC 2019-2020: 100% of students achieved 100% skills completion. (NOTE: one student did not yet complete the course requirements before the academic year reporting was due. The incomplete work was related to the COVID-19 shutdown and will be completed in the following semester. The results indicated with the asterisk include all students who completed the assessment procedure.)

Analysis. In AC 2018-2019, the target was met. Because recommendations were implemented in AC 2018-19 and continued in AC 2019-2020, the target was met for all students completing the course. One student has one outstanding laboratory session to make up, and the completion is delayed until the next semester because of the abrupt end of the semester face-to-face sessions due to COVID-19 concerns. The semester laboratory sessions were completed for the remaining students by meeting all sessions in the days before the face-to-face sessions were closed. Outcomes analysis suggests that continuing these practices ensures meeting this target during normal semester scheduling.

Decision. In AC 2019-2020, the target was met. Based on the analysis of the 2019-2020 results, the plan is to have hands-on individualized instruction, documentation of each student's attainment of skills, and the requirement that each student must attain the

AC 2019 – 2020 Assessment

required skills to receive a successful grade of course completion. Attendance of each laboratory session as scheduled or by make-up sessions will continue to be required to ensure that each student attains the required skills.

SLO 2. Students completing the second/third year sequence of courses in Veterinary Technology will demonstrate development of required didactic knowledge base and will demonstrate required “hands-on” technical skills application (which will be documented for each student).

Course Map: Tied to course syllabus objectives/outline.

VTEC 2060: Veterinary Pharmacological Calculations Lecture

VTEC 2600: Animal Care and Health Lecture

VTEC 3010: Animal Diseases Lecture

VTEC 3200-3201: Veterinary Hospital Technology II Lecture/Laboratory (63 skills)

VTEC 3700-3701: Veterinary Radiology Lecture/Laboratory (11 skills)

Measure: 2.1. (Direct – Knowledge)

Students enrolled in VTEC 2060, 2600, 3010, 3200, and 3700 will demonstrate proficiency in accrediting-agency (AVMA-CVTEA) required didactic skills/knowledge base following standard criteria for evaluating essential skills. Eighty percent of students completing the course(s) will be able to demonstrate a basic understanding by averaging 70% or higher scores on the examinations.

Finding. Target was met.

Assessment Year	Course	# Students Enrolled	# Students Scoring 70% avg. or higher on exams	Percent Students Meeting Measure
2018-2019	VTEC 2060	25	19	76%
2018-2019	VTEC 2600	19	15	79%
2018-2019	VTEC 3010	20	17	85%
2018-2019	VTEC 3200	16	14	88%
2018-2019	VTEC 3700	20	19	95%
2018-2019	TOTAL	100	84	84%

Assessment Year	Course	# Students Enrolled	# Students Scoring 70% avg. or higher on exams	Percent Students
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AC 2019 – 2020 Assessment

				Meeting Measure
2019-2020	VTEC 2060	40	35	88%
2019-2020	VTEC 2600	25	17	68%
2019-2020	VTEC 3010	22	21	95%
2019-2020	VTEC 3200	10	10	100%
2019-2020	VTEC 3700	15	15	100%
2019-2020	TOTAL	112	98	88%

AC 2018-2019: 84% of students achieved 70% or higher scores

AC 2019-2020: 88% of students achieved 70% or higher scores

Analysis. In AC 2018-2019, the target was met. AC 2019-2020, the overall target was met. For most lecture courses evaluated in this sequence, outcomes improved over those of first-year courses. This is almost certainly due to the students who are not as interested and motivated to learn veterinary technician required knowledge changing to another major course of study by their sophomore or junior years. The veterinary technology program remains an open enrollment program, and students experiencing the first-year courses discover whether they are suited to the demands of a challenging program and career in veterinary medicine. With the implementation of more intensive instruction and the use of case studies in teaching, as well as early intervention when students are not performing well, upperclassmen students are now meeting the target overall. The one course of concern is VTEC 2600, which is a transition course from freshmen level to more intensive study and examinations.

Decision. In AC 2019-2020, the target was met. Based on the analysis of the 2019-2020 results, and to drive improvement, the practices put in place for student instruction and intervention will continue. Additionally, for VTEC 2600, study sessions outside class time will be offered, and mock exam questions will be available for students to practice answering in preparation for examinations. The target will be changed to measure the overall class performance with student course grades of 70% or better by 80% of enrolled students.

Measure: 2.2. (Direct – Skill / Ability)

One hundred percent of students enrolled in VTEC 3201 will demonstrate mastery of 63 animal medical and surgical nursing and anesthetist skills through participation in live animal surgical procedures laboratories. One hundred percent of students enrolled in VTEC 3701 will demonstrate ability to complete 11 technical skills pertaining to diagnostic imaging. Each skill attainment will be documented in a student specific booklet for student

AC 2019 – 2020 Assessment

demonstration/completion. Booklets will be evaluated for entire completion prior to student enrollment in internship practicum courses.

Finding. Target was met.

Assessment Year	Course	# Students Enrolled	# Students Performing All Documented Skills	Percent Students Meeting Measure
2018-2019	VTEC 3201	16	16	100%
2018-2019	VTEC 3701	17	17	100%
2018-2019	TOTAL	33	33	100%

Assessment Year	Course	# Students Enrolled	# Students Performing All Documented Skills	Percent Students Meeting Measure
2019-2020	VTEC 3201	10	10	100%
2019-2020	VTEC 3701	15	15	100%
2019-2020	TOTAL	25	25	100%

AC 2018-2019: 100% of enrolled students performed all required skills

AC 2019-2020: 100% of enrolled students performed all required skills

Analysis. In AC 2018-2019, the target was met and continued to be met in AC 2019-2020. Because of the stringent requirements for laboratory attendance and completion of skills to earn a passing grade, students who successfully complete these laboratory courses perform all required skills. For Spring 2020, this required that students attend laboratory sessions on an expedited time frame to complete all skills before face-to-face sessions were halted because of COVID-19. Students were outstanding in their participation, completing 26 anesthesia/surgery/dental prophylaxis procedures within one week, working in teams of 3-4 students with four faculty/staff instructors.

Decision. In AC 2019-2020, the target was met. Based on the analysis of the 2019-2020 results, the plan is to leverage hands-on individualized instruction, documentation of each student's attainment of skills, and the requirement that each student must attain the required skills to receive a successful grade of course completion. Attendance of each laboratory session as scheduled or by make-up sessions will continue to be required to ensure that each student attains the required skills.

SLO 3. Following completion of other required courses entitled Veterinary Technology (VTEC), each student must enroll in a 12-credit hour internship practicum for 480 clock hours working under the direct supervision of veterinarians and/or credentialed veterinary technicians/technologists. The supervisor must submit comprehensive evaluations of each student's technical skills, reliability, and attitude while completing the practicum(s). Each student submits an evaluation of the internship site and supervisory staff to the program

AC 2019 – 2020 Assessment

director at the completion of the internship practicum course. The students will receive positive ratings greater than or equal to 90% of the time.

Course Map: Tied to course syllabus objectives/outline.

VTEC 2900: Veterinary Internship Practicum

Measure 3.1. (Direct – Skill / Ability)

For VTEC 2900 participating students, each student’s direct internship supervising veterinary professional will submit a written evaluation of the student’s technical performance of the required 301 technical skills, rating the skills performance for each one on a scale of measurement of 0 – not applicable; 1 – poor; 2 – good; or 3 – excellent. Program expectations are that ratings of good-excellent will be earned for 95% or more of skills rated for each class of interns.

Finding. Target was met.

Assessment Year	VTEC 2900	Excellent	Good	Poor
2018-2019	# ratings of skills performance	865	377	0
2018-2019	% ratings of skills performance	69.6%	30.4%%	0.0%

Assessment Year	VTEC 2900	Excellent	Good	Poor
2019-2020	# ratings of skills performance	553	658	39
2019-2020	% ratings of skills performance	44.2%	52.7%	3.1%

AC 2018-2019: 100% of student skills performance rated good-excellent

AC 2019-2020: 96.9% of student skills performance rated good-excellent

Analysis. In AC 2018-2019, the target was met, and continued to be met in AC 2019-2020. The third learning outcome (SLO 3) measures the perception and rating of VTEC 2900 internship practicum students by supervising veterinarians/credentialed veterinary technicians in a veterinary hospital setting. Students in the 2019-2020 academic year seldom received a negative rating for individual skills performance. This demonstrates that students who complete the challenging course curriculum prior to the internship course are prepared to handle the demands of the workplace and have the essential skills that please employers.

Decision. In AC 2019-2020, the target was met. Based on the analysis of the 2019-2020 results, the program instructors plan to invest in hands-on instruction of skills that are valued by employers of graduates.

Measure 3.2. (Indirect – Attitude / Reliability)

AC 2019 – 2020 Assessment

Each student enrolled in VTEC 2900 is evaluated by the supervisor in the veterinary setting on several subjective performance indicators which pertain to job performance. The final evaluation includes ratings of Above Average, Average, Below Average, or Not Observed, for each student’s maturity and judgment, dependability/reliability, initiative/originality, function as a team member, communication skills, work-place character/integrity/ethics, and potential as a veterinary technician. Additionally, the supervisor is asked to state the student’s strongest and weakest points. The program expects 5% or less negative ratings (Below Average) for each class of interns.

Findings: Target was met.

Assessment Year	VTEC 2900	Above Average	Average	Below Average
2018-2019	# ratings of subjective characteristics	59	12	0
2018-2019	% ratings of subjective characteristics	83%	17%	0.0%

Assessment Year	VTEC 2900	Above Average	Average	Below Average
2019-2020	# ratings of subjective characteristics	64	32	5
2019-2020	% ratings of subjective characteristics	63%	32%	5%

AC 2018-2019: No ratings of subjective characteristics below average

AC 2019-2020: Five (5) percent of ratings of subjective characteristics below average

Analysis. In AC 2018-2019, the target was met. AC 2019-2020, the target was met, as it was in AC 2018-2019. Program students during AC 2019-2020 earned few (5%) negative ratings from supervisors in subjective characteristics such as work-place character/integrity/ethics, reliability, etc. This measure was even more positive for AC 2018-2019, with a remarkable 0.0% of negative ratings of subjective characteristics for internship practicum students. This demonstrates that students who complete the challenging program curriculum to the internship course have the work ethic and dependability characteristics valued by employers of veterinary technicians.

Decision. In AC 2019-2020, the target was met. Based on the analysis of the 2019-2020 results, the plan is to have the delivery of the veterinary technology curriculum with requirements encouraging student ownership for their individual outcomes, and to assess students in part based on reliability in the care of animals, etc., which correlates well with their workplace performance during internships and after graduation.

AC 2019 – 2020 Assessment

SLO 4. Students will demonstrate proficiency in Veterinary Technology by passing scores of first-time test takers on the Veterinary Technician Examination equal to the national average when evaluated over the most recent three-year window of time and will meet or exceed the national average for each measured domain score in the most recent evaluation available.

Measure 4.1. (Direct – Knowledge)

Students taking the **Veterinary Technician National Examination (VTNE)** will demonstrate proficiency by obtaining passing scores in percentages *equal to the national average percent* of students passing the examination on the first attempt, when examining the most recent available three-year school report. The VTNE is scored from 200-800, with 425 being a passing score. School reports are provided by the test administrators for each examination cycle and for the most recent three years ending on June 30.

Finding. Target results not yet available.

VTNE July 2015—June 2018	Pass	Fail
NSU graduates' performance (#)	14	10
NSU graduates' performance (%)	58.33%	41.67%
National average (%)	69.94%	30.06%

VTNE July 2016—June 2019	Pass	Fail
NSU graduates' performance (#)	21	13
NSU graduates' performance (%)	61.8%	38.2%
National average (%)	71%	29%

VTNE July 2017—June 2020	Pass	Fail
NSU graduates' performance (#)		
NSU graduates' performance (%)	%	%
National average (%)	%	%

NOTE: Scores for last testing window not yet available; testing disrupted by COVID-19.

AC 2018-2019: Improvement. NSU graduates--61.8% pass rate over last 3 years; national average pass rate is 71%.

AC 2019-2020: Data not available

Analysis. In AC 2018-2019, the target was not met. The expected outcome is that graduates will equal the national pass rate percentage on their first attempt to pass the VTNE. While NSU graduates have not met this target to date, the three-year pass rate has continued gains over the last few years and is coming close to the national pass rate percentage in the most recent measures available. This demonstrates that the students are being exposed to the materials required to be successful on the examination. Some individual students continue to be not well motivated to review and prepare for the examination before attempting it for the first time, as demonstrated by the wide range of

AC 2019 – 2020 Assessment

raw scores for individual students. Based on the analysis of the 2018-2019 results, in 2019-2020 the instructors in the VTNE comprehensive review course have added review of the examination domain structure and weighting, as well as requiring that each enrolled student take an online practice exam as a culmination of the course activity, with the goal of encouraging individuals to spend more time in preparation before the examination.

Decision. Based on the analysis of the 2019-2020 results available to date, and to drive improvement, in 2020-2021, measures that are proven to have success in driving improvements in VTNE scores will continue.

Measure 4.2. (Direct – Knowledge)

Additionally, nine domain scores by subject are provided to each school, which is helpful in determining when/where program curriculum changes/improvements are needed. The program director, along with program veterinary faculty/staff, evaluates the data provided in the most recent available school report for a comprehensive view of a comparison of our graduates to a national standard by subject. The goal is to have students meeting or exceeding the national average score for each domain subject.

Finding. Target was not met.

VTNE Domain March 15 – April 20, 2018	NSU Grad. Avg. Percent Correct	National Avg. Percent Correct
Pharmacy & Pharmacology	64.81%	62.07%
Surgical Nursing	60.78%	57.39%
Dentistry	65.00%	62.53%
Laboratory Procedures	68.52%	65.04%
Animal Care & Nursing	70.71%	69.06%
Diagnostic Imaging	63.64%	56.83%
Anesthesia	59.72%	60.39%
Emergency Med/Critical Care	59.26%	57.23%
Pain Management/Analgesia	55.00%	61.55%
RAW TOTAL	61.21%	62.49%

VTNE Domain July 15-August 15, 2018	NSU Grad. Avg. Percent Correct	National Avg. Percent Correct
Pharmacy & Pharmacology	83.33%	78.96%
Surgical Nursing	73.53%	67.61%
Dentistry	58.33%	69.05%
Laboratory Procedures	76.47%	71.14%
Animal Care & Nursing	68.33%	68.85%
Diagnostic Imaging	86.36%	67.51%
Anesthesia	77.27%	72.61%
Emergency Med/Critical Care	66.67%	71.00%

AC 2019 – 2020 Assessment

Pain Management/Analgesia	72.73%	66.62%
RAW TOTAL	73.67%	70.66%

VTNE Domain Nov 15-December 15, 2018	NSU Grad. Avg. Percent Correct	National Avg. Percent Correct
Pharmacy & Pharmacology	70.00%	72.77%
Surgical Nursing	69.41%	64.26%
Dentistry	60.00%	64.58%
Laboratory Procedures	65.88%	64.38%
Animal Care & Nursing	63.33%	64.13%
Diagnostic Imaging	74.55%	62.15%
Anesthesia	70.91%	68.80%
Emergency Med/Critical Care	55.00%	60.71%
Pain Management/Analgesia	67.27%	60.44%
RAW TOTAL	66.40%	65.24%

VTNE Domain March 15-April 19, 2019	NSU Grad. Avg. Percent Correct	National Avg. Percent Correct
Pharmacy & Pharmacology	68.52%	72.49%
Surgical Nursing	60.78%	65.39%
Dentistry	72.22%	71.29%
Laboratory Procedures	49.02%	61.65%
Animal Care & Nursing	61.11%	66.23%
Diagnostic Imaging	81.82%	61.11%
Anesthesia	68.18%	64.30%
Emergency Med/Critical Care	55.56%	67.36%
Pain Management/Analgesia	57.58%	53.44%
RAW TOTAL	63.33%	65.27%

VTNE Domain (Official report format changed) July 15—August 17, 2019	NSU Grad. Avg. Percent Correct*	National Avg. Percent Correct*
Pharmacy & Pharmacology	74.07%	83.04%
Surgical Nursing	78.43%	68.78%
Dentistry	75.00%	78.23%
Laboratory Procedures	54.90%	67.36%
Animal Care & Nursing	75.56%	70.54%
Diagnostic Imaging	75.76%	73.71%
Anesthesia	75.76%	71.39%
Emergency Med/Critical Care	72.22%	72.20%
Pain Management/Analgesia	51.52%	65.15%
RAW TOTAL	71.33%	72.19%

AC 2019 – 2020 Assessment

VTNE Domain (Official report format changed) November 15--December 20, 2019	NSU Grad. Avg. Percent Correct*	National Avg. Percent Correct*
Pharmacy & Pharmacology	76.67%	75.37%
Surgical Nursing	71.76%	68.40%
Dentistry	65.00%	68.81%
Laboratory Procedures	80.00%	69.87%
Animal Care & Nursing	68.00%	72.01%
Diagnostic Imaging	76.36%	64.12%
Anesthesia	60.00%	68.39%
Emergency Med/Critical Care	68.33%	68.58%
Pain Management/Analgesia	58.18%	58.78%
RAW TOTAL	69.33%	69.15%

VTNE Domain (Official report format changed) March ----April ----, 2020	NSU Grad. Avg. Percent Correct*	National Avg. Percent Correct*
Pharmacy & Pharmacology		
Surgical Nursing		
Dentistry		
Laboratory Procedures		
Animal Care & Nursing		
Diagnostic Imaging		
Anesthesia		
Emergency Med/Critical Care		
Pain Management/Analgesia		
RAW TOTAL		

NOTE: Scores for MARCH-April 2020 not yet available; testing disrupted by COVID-19.

AC 2018-2019: Improving. All four target areas from this year's focus for improvements had increases in the most recent testing window, with each domain score (Dentistry, Diagnostic Imaging, Anesthesia, and Pain Management/Analgesia) now above the average for first time test takers.

AC 2019-2020: One set of data is missing at the time of reporting due to delays in testing secondary to stay-at-home restrictions from COVID-19. Surgical Nursing, Laboratory Procedures, Diagnostic Imaging domains have NSU graduates exceeding the national average in the most recent test window data available.

Analysis. In AC 2018-2019, the target was not met. When the domain scores were evaluated AC-2018-2019, improvements were seen in focus areas (Dentistry, Diagnostic Imaging, Anesthesia, and Pain Management/Analgesia). In 2019-2020, a new focus, Laboratory Procedures, was added based on lower scores in that domain. This focus has

AC 2019 – 2020 Assessment

resulted in graduates scoring 10% above the national average in that category in the most recent testing window (Nov-Dec 2019) that scores are available.

Decision. Based on the analysis of the 2019-2020 results, and to drive improvement, the focus for the next academic year (2020-2021) will be improvement in scores in the Anesthesia domain. Intensive study and review will be encouraged and required in the comprehensive review course (VTEC 4200).

Comprehensive Summary of Key Evidence of Improvements Based on Analysis of Results

- For freshman level course (VTEC 1030), implemented daily quizzes to encourage attendance and participation in course learning; after course moved online secondary to COVID-19 restrictions, daily quizzes were timed to encourage login at scheduled course meeting times. Target measure improved to 84% from 80% in the prior assessment year.
- Early intervention was practiced for individual students with records of missed attendance or lower exam scores, providing resources for academic improvement and/or counselling as needed in all VTEC lecture courses.
- In veterinary technology laboratory courses, hands-on individualized instruction with a low faculty to student ratio (1:6 – 1:8) and required documentation of completion of essential technical skills resulted in 100% completion of all required skills by each student completing each course.
- For more advanced VTEC lecture courses, implemented more intensive instruction and applied learning using case study assignments for developing critical thinking skills and simulated real world scenarios that graduates must be prepared to manage. Students were assessed in skills that correlate with those demanded in internship practicum and workplace performance. Internship supervisors rated student performance positively (good/excellent) at a rate (>95%) meeting the target goal.
- In order to improve student/graduate performance on the Veterinary Technician National Examination (VTNE), added review of the domain structure and weighting of the exam, and restructured courses entailing laboratory procedures (VTEC 3190-3191; VTEC 3100-3101) with goal of improving the domain score of graduates in that subject. This resulted in a score in that domain of 10% higher than the national average in the most recent cohort of graduate scores measured.
- A scored online practice VTNE examination was required of each student for completion of VTEC 4200 in order for the student to gauge exam preparation level and encourage pre-examination review in domain areas where scores were low. The VTNE pass rate is meeting accrediting agency guidelines and has shown steady improvement over the past few years.

AC 2019 – 2020 Assessment

Plan of Action Moving Forward

The program is succeeding in teaching hands-on skills to students required of a competent veterinary technician and is meeting overall pass rate targets on didactic examinations in the first-year and beginning second-year students, meeting target goals in SLOs 1,2, and 3. By the second and third years of education, veterinary technology students are reaching target goals for examination pass (70%) rates. The target goals will be changed to examine overall performance in the courses, thereby assessing class assignments performance as well as examinations performance.

The program is meeting its mission of producing clinically competent veterinary technicians, as evidenced by meeting target goals of internship practicum student evaluations by supervising veterinarians and veterinary technicians in the field. (SLO 3).

The program is not yet meeting the target of Veterinary Technicians National Examination (VTNE) pass rates meeting the national average when evaluated over the past three years, but improvements are evident (SLO 4). Three-year average pass rates have climbed from 51.5% (AC 2015-2016) to 56.7% (AC 2016-2017) to 60% in AC 2017-2018 and 61.8% in AC 2018-2019. In AC 2019-2020, results are incomplete at the time of reporting but are encouraging. The faculty/staff continues to invest efforts in improving domain scores in clinical areas indicated by the latest evaluation as areas where students score below the pass rate on average.

The program faculty/staff will continue diligently working to produce graduates who are competent, professional, and compassionate towards their patients and clients. Efforts will continue to develop each student's knowledge base, and to remove, whenever possible, obstacles to learning. Specific efforts will be made to motivate students to review and prepare for the VTNE examination, and to inform them of the domains and expose them to the format of testing. Methods that have resulted in improvements in reaching targeted goals will continue.

Program graduates have been provided with the opportunities required to be competent veterinary technicians, and employer demand for NSU graduates within the State of Louisiana is readily visible evidence to support this statement. Getting each student to take advantage of those opportunities for learning will continue to be encouraged by program faculty/staff.