

# Using Data to Improve Academic Programs and Student Success

**Clint Ary, Jason Roberts, Joey Mehlhorn, and  
Scott Parrott**

**University of Tennessee at Martin**

# Veterinary Technology Program Background

- This option is a four-year Bachelor of Science in Agriculture with a concentration in Animal Science and the option of Veterinary Health Technology.
- This degree provides a well-rounded education including an emphasis on hands-on, experiential learning, and laboratory opportunities. Career work will be similar to that of a nurse in the medical field.
- The curriculum includes courses in animal science and veterinary technology and a hands-on learning environment with top faculty members.
- Upon graduation, students are prepared to work with animals in many settings, including zoos, private and referral veterinary practices, pharmaceutical sales, research laboratories, and the list goes on.

# Focus on What is Important

- Hands on laboratory experiences
- Faculty mentoring
- Industry experiences
- Repetitive assessments on key skills and knowledge
- Adequate board testing preparation



# The Need for A Culture of Assessment

- December 2015 – UT Martin was placed on probation by Southern Association of Colleges and Schools Commission on Colleges (SACSCOC)
  - Issues were related to Institutional Effectiveness for not having measures in place to document and communicate student learning outcomes.
- All departments immediately worked to develop reporting mechanisms and methods for collecting and storing data.
- December 2016 – UT Martin was removed from probation.
- Reinforced sense of the importance of assessment.

# Accreditation Issues

- Requirements AVMA-CVTEA

- “11a. The program must develop program-specific outcome assessment instruments that assist in determining attainment of the educational goals. Such instruments shall include, but are not limited to, attrition rates, graduate and employer surveys, pass rates and domain scores of the Veterinary Technician National Examination (VTNE) as compared to the national average and applicable state examination pass rates. The results of all outcome assessments must be used to improve the program. In absence of significant data from peer reviewed examinations, programs must develop objective means to assess student competency.”

- CVTEA Accreditation Policies and Procedures-Standards

# Veterinary Technician National Examination

- Exams given three times per year
- Three hour examination
- 170 multiple choice questions
- Produced by American Association of Veterinary State Boards



# VTNE Materials



strengthening the veterinary  
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## Services for Future Veterinarians and Veterinary Technicians



A grid of nine white cards with rounded corners, each representing a step in the VTNE process. Each card has a title, a brief description, and a 'View more' button with a right-pointing arrow. The steps are: Step 1: Verify your VTNE Eligibility; Step 2: The Online Application; Step 3: Application Status; Step 4: Schedule Your Exam; Step 5: Study for the VTNE; Step 6: Withdraw Application; Step 7: Score Report; Step 8: Retake the VTNE; Step 9: Your Credential.

There are numerous online resources available to students as they prepare for licensure. (American Association of Veterinary State Boards, [www.aavsb.org/vtneoverview](http://www.aavsb.org/vtneoverview))

# Methods

- All VET student data is tracked for accreditation purposes and internal review.
- Student pass rates were obtained from VTNE testing services.





# Results

- The data from VTNE results revealed the following significant factors that impact first-time pass rates for the VTNE
  - General Chemistry
  - Probability and Statistics
  - Veterinary Technology Surgery, Anesthesia, and Dentistry
  - ACT score
  - College GPA
  - Specialty internship
  - At least one failing grade

# Significance of Probability and Statistics and General Chemistry

- Students are expected to be able to figure dosages, fluid rates, and other common calculations
- The ability to interpret and explain diagnostic tests and advise clients based on epidemiological studies
- Chemistry is an important foundation to a variety of subjects within veterinary medicine



# Significance of Veterinary Technology Surgery, Anesthesia, and Dentistry

- This cornerstone course is completed at the end of the curriculum and makes up a large percentage of the VTNE
- The course is offered with a required lab that serves to reinforce the skills and knowledge obtained through the course

<b>VTNE PRACTICE DOMAINS</b>	
<b>Domains</b>	<b>% of Items</b>
<b>Domain 1. Pharmacy &amp; Pharmacology</b>	<b>12</b>
<b>Domain 2. Surgical Nursing</b>	<b>11</b>
<b>Domain 3. Dentistry</b>	<b>7</b>
<b>Domain 4. Laboratory Procedures</b>	<b>12</b>
<b>Domain 5. Animal Care and Nursing</b>	<b>22</b>
<b>Domain 6. Diagnostic Imaging</b>	<b>7</b>
<b>Domain 7. Anesthesia</b>	<b>16</b>
<b>Domain 8. Emergency Medicine/Critical Care</b>	<b>6</b>
<b>Domain 9. Pain Management/Analgesia</b>	<b>7</b>

# Significance of Specialty Internships

- After completion of all course work, students must complete a six-week internship prior to graduation
- Many students choose to complete an internship at a specialty animal hospital
- Examples:
  - University of Tennessee College of Veterinary Medicine
  - Auburn University College of Veterinary Medicine
  - Memphis Veterinary Specialists



# Significance of Specialty Internships cont.

- Why would specialty internships lead to higher probability of passing VTNE?
  - Varied experience
  - Rotations
  - More academic environment

# Future Direction

- Continue to monitor student success rate on the national board exam and look for ways to improve the student performance.
- Actively track student performance after the exam to understand the student perspective.
- Continue to have faculty attend training on best practices so they can constantly improve the program.

# Future Direction

- Look to incorporate more online training tools earlier in the program.
- Use the data from VTNE exam to identify and improve deficiencies in the curriculum.
- Continue to look for new experiential learning opportunities for the students
- Hope to find more positive predictors of success on VTNE as numbers increase

# Questions

- Clint Ary, DVM
- Assistant Professor of Animal Science
- 256 Brehm Hall, Martin, TN 38238
- 731-881-1071
- [cary1@utm.edu](mailto:cary1@utm.edu)