

National Board Report

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Driving the Curriculum

"Pay attention, because this is going to be on the test." We have all heard this statement from teachers, and it works, because if students know that something is going to be on the examination, they do tend to listen more carefully. This leads to the observation that assessment drives the curriculum. If a topic is likely to be addressed on the examination, then there is an incentive for teachers to include it in their course materials. In my opinion, this isn't necessarily a bad thing, particularly if the examination is designed to assess the proper content.

Like all national licensing examinations, the NAVLE is based on a job analysis that gives practitioners the opportunity to tell the board what knowledge is important in private practice. Topics that practicing veterinarians think are important are included on the test blueprint.

As an example, the 2003 NAVLE job analysis resulted in the addition of a new content area to the blueprint, "Professional Behavior, Communications, and Practice Management." This was done because practitioners indicated that these things were important in practice. If the addition of this content area to the NAVLE resulted in more schools covering these topics in the curriculum, then that was a good thing. Similarly, as long as the profession believes that entry-level veterinarians should have "multi-species clinical expertise," the NAVLE will continue to cover a variety of animal species and will, to a certain extent, continue to "drive the curriculum."

John R. Boyce, DVM, PhD
Executive Director

January 2011 NBVME Meeting

The NBVME met in Phoenix, Arizona on January 28-29.

NAVMEC

The board heard a presentation from Dr. Mike Thomas, the NBVME's representative to the North American Veterinary Medical Education Consortium (NAVMEC). Dr. Thomas, a former NBVME member, serves as vice-chair of the NAVMEC Board of Directors. He gave an update on NAVMEC, and reviewed the eight core competencies developed through the NAVMEC process:

- Multi-species clinical expertise
- Public health/one health knowledge and expertise
- Interpersonal communication
- Collaboration
- Management
- Lifelong learning, scholarship, value of research
- Ethics and professional leadership
- Diversity/multicultural awareness
- Adapt to changing environments

One of the specific recommendations in the draft NAVMEC report is that the NAVLE be revised to optimize evaluation of these core competencies.

Dr. Thomas noted that the NAVMEC board has discussed the possibility of a new veterinary school entrance examination, designed specifically to assist admissions committees in evaluating applicants. Dr. Thomas also offered some observations on the demographics of the profession, from his perspective as a private practice owner. Finally, he encouraged all stakeholders to submit comments at www.navmec.org.

Two-Step NAVLE

The board continued discussion of the idea of a two-step NAVLE, which

would include a basic science examination (Step 1) taken after the first two years, and a clinical science examination (Step 2) taken after the third year. The board reviewed comments from 23 basic science faculty members who have participated as NBVME Qualifying Examination item writers and/or reviewers, and input from the AVMA Council on Education. There was also discussion about the idea of a step 3 examination that would assess communication skills and certain clinical skills.

NAVLE® Trademark

The board reviewed the use of the term "NAVLE" by outside groups that offer test preparation materials, noting that NAVLE is a registered trademark. Recent correspondence between the NBVME and several publishers and web sites has resulted in greater use of the trademark symbol with the acronym, and inclusion of a statement indicating that the materials offered by third parties are not sponsored by or affiliated with the NBVME.

Strategic Plan

The board reviewed the priority areas identified in the strategic plan approved in July 2010. In addition to addressing the NAVMEC core competencies, the board will focus efforts in the coming year on models of relationship with the NBME, an outreach plan to veterinary schools, and a survey of licensing board members for possible new examinations.

Next Meetings

The board will meet in Philadelphia April 13-14 for the annual NAVLE form review, and on July 22-23 in Bar Harbor, Maine.

New Options for Overseas Testing

Beginning with the April 11-23, 2011 testing window, NAVLE candidates outside the US and Canada will have more options for taking the examination. Previously, the NAVLE was available only in the US, US territories, Canada, and in countries where there was an AVMA accredited veterinary school. These have included England, Scotland, Ireland, the Netherlands, Australia, and New Zealand.

Through its relationship with the National Board of Medical Examiners, the NBVME is now able to offer the NAVLE at Prometric testing centers in approximately 47 countries around the world, using centers that also offer the NBME's United States Medical Licensing Examination. These centers meet the same test security standards as Prometric centers in North America. All NAVLE candidates taking the examination outside North America pay an additional fee for overseas testing, presently \$275.

JANUARY 2011 VCSA

The NBVME's Veterinary Clinical Skills Assessment (VCSA) is a two-day hands-on practical examination, offered as an option for step 4 of the Program for the Assessment of Veterinary Education Equivalence (PAVE) of the American Association of Veterinary State Boards (AAVSB). The VCSA is given at the veterinary technology facilities at Cedar Valley College in Dallas. College faculty and staff assist with the administration of the examination.

The VCSA consists of 16 stations that require candidates to demonstrate proficiency in a variety of clinical skills. At each station, candidates are evaluated by one or more trained examiners, using checklists to record

candidate performance. Four stations test the candidate's communication skills in realistic clinical encounters, using actors who portray clients.

The VCSA was administered for the seventh time on January 8-9, 2011. Six PAVE candidates took the examination. These candidates were graduates of six different non-accredited veterinary schools.

On January 25, the NBVME Executive Committee reviewed the results of the examination, and voted to pass four of the six candidates.

The NBVME will cooperate with the AAVSB on scheduling future VCSA administrations.



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NAVLE Scoring Options Explored

One of the priorities in the NBVME's strategic plan is to see whether it would be possible or desirable to have minimum passing standards for various sections of the NAVLE. Presently, only the overall score counts, regardless of a candidate's strength and weakness in individual content areas. The board discussed whether it was acceptable to allow a candidate to pass the NAVLE if they know a great deal about canine medicine and relatively little about bovine medicine, or vice versa.

The NBVME asked Dr. Raja Subhiyah, NBME staff psychometrician, to investigate this question, and he presented his findings to the board at its meeting in Phoenix. Dr. Subhiyah stated that the NAVLE candidate population was relatively homogeneous (students or graduates of veterinary school), while the content covered on the NAVLE was relatively heterogeneous (multiple animal species and knowledge areas). Therefore, it is important to have a sufficient number of items on which to base a pass/fail decision.

In a single score model, there is only one overall pass/fail decision, and strong knowledge by a candidate in

one area can compensate for weak knowledge in another area. The relative importance of the various content areas is accounted for by weighting (more items in some areas than others). With profile scoring, there are individual pass/fail standards for the various content areas, and no compensation.

Assumptions for a single score model include that the test measures one body of knowledge, the subcategories are highly correlated (>0.7), the passing standard is reliable because it is based on a large number of items (about 300), and different content categories are appropriately weighted by the number of items on the test.

For profile scoring, the test must measure relatively unrelated content areas (correlations <0.5), and there is a separate score and passing standard for each area that all candidates must meet. Because the number of items in each content area is appreciably less than the total number used for the single score model, the passing standards are less reliable.

An analysis of NAVLE items in the small animal and food animal cate-

gories showed that they were correlated at 0.8, and both areas had a corrected correlation of 1.0 with the total examination score. In other words, candidates who did well on either the small animal or food animal items tended to do well on the total examination. Further, a factor analysis of the various content categories in the NAVLE yielded only one strong factor, suggesting a high degree of redundancy among the category scores. An analysis of candidate scores by class focus (supplied by accredited schools for many NAVLE candidates), showed some difference in candidate performance on small animal and food animal items by small animal or food animal class focus. However, both groups performed similarly on the total test.

In summary, the data support the single score model presently used on the NAVLE, and argue against profile scoring. Following the presentation, the board agreed that no changes to the NAVLE scoring process were warranted at this time.

Research Project Investigates NAVLE Candidate Pacing

Drs. Raja Subhiyah and John Boyce authored a paper in the Winter 2010 issue of the *Journal of Veterinary Medical Education* (JVMÉ 2010;37:377-382.) The paper looked at the effects of increasing word count on the pacing of candidates during each section of the NAVLE, and at the performance of candidates on test items as a function of item length and presentation order.

NAVLE candidates have, on average, about one minute per item. Case-based items, like those now com-

monly used on the NAVLE, are longer than the recall items previously used on board examinations. Candidates have raised concerns about not having enough time to read and answer some of the questions on the examination. The NBVME wanted to see whether the longer items had an adverse impact on candidate performance.

As expected, the study documented an increase in word count on NAVLE items from 2001 to 2008. However, no significant relationship

was found between word count and item difficulty, item omission, or candidate pacing.

Although French items were somewhat longer than their equivalent English items, no significant pacing problems were found for candidates taking the French forms of the NAVLE, either.

Copies of the paper are available from the NBVME office.

2011-12 NAVLE AGREEMENTS

Letters of Agreement between the NBVME and individual licensing boards covering the 2011-2012 NAVLE testing cycle were mailed to boards on February 1.

The candidate fee will remain the same as it was for 2010-2011, \$550. The testing windows will be November 14 - December 10, 2011 and April 9-21, 2012. The application receipt deadlines will remain August 1 and January 3, and will apply to both the national NAVLE application and the application for state approval.

The NBVME office has been approving NAVLE candidates on behalf of licensing boards since 2004. For the fall 2010 testing window, the NBVME office approved 1,968 candidates for 21 boards.

Examination Statistics

NAVLE

A total of 3,742 candidates took the NAVLE during the November 15-December 11, 2010 testing window, an increase of 110 from fall 2009. Scores were reported to licensing boards on January 11. There were 3,012 criterion candidates, 168 non-criterion candidates, and 562 foreign-trained candidates. Criterion candidates are senior students at AVMA accredited schools taking the examination for the first time.

The passing rate for fall 2010 criterion candidates was about 95%, compared to 96% and 93% for the same group in fall 2009 and 2008, respectively.

The NBVME office has submitted eligibility files to the NBME for 583 new candidates and 287 repeating candidates for the April 14-24, 2011 NAVLE administration.

Qualifying Examination

The most recent web-based Qualifying Examination (QE) was administered to 200 PAVE candidates on January 20, 2011. The examination was offered in St. Kitts, Grenada, and Grand Cayman, at 16 sites in the US, and in Canada, South Korea, Scotland, and Ireland. Scores were reported to the AAVSB on February 24. The passing rate for the 149 PAVE first time test takers was 79.2%. The next QE administration is May 12.

A total of 145 third year students at Iowa State University and 67 third year students at Tuskegee University also took the QE on January 20. Western University will administer the QE to their students in May. Additional accredited schools interested in using the QE should contact the NBVME office.