Cut Scores and Equating

The American College of Veterinary Pathology (ACVP) has an obligation to candidates and other stakeholders to set passing points (cut scores) for its certifying examinations that appropriately reflect the minimum level of knowledge and skills necessary to function as a newly certified veterinary pathologist. The cut score is the score that a candidate must achieve to pass an examination. Until 2014, the cut score for the ACVP certifying examinations was subjectively set at 60%. It is current best practice for all cut scores for professional certifying examinations to be analytically determined using a criterion-referenced process. A criterion-referenced process is one that is based on the evaluation of questions and scores relative to the minimum level of proficiency required for certification.

In 2014, the ACVP for the first time set the cut scores for the certifying examinations using a criterion-referenced standard setting study. Nine diplomates from each ACVP specialty met under the direction of a professional psychometrician for 3 days to evaluate every question in each examination and to provide information that guided the determination of the cut score. Using their professional judgment and assisted by statistical analysis of their evaluations, the panel recommended the minimum scores that entry-level candidates should achieve to pass. Council reviewed the recommendations and established the cut scores for 2014 based on this analysis.

A standard setting study could be conducted to set new cut scores for every examination, but it generally is not practical or economically efficient to conduct a full standard setting study for each examination cycle. However, the ACVP must ensure that examinations are of comparable difficulty from one year to the next so that all candidates are tested fairly regardless of the year the examination is taken. The process of comparing the difficulty of different examinations and adjusting scores to reflect these differences is called equating and the ACVP began this process in 2015. To equate, candidate responses and scores for each examination are compared to a reference examination that has a criterion-referenced cut score based on a standard setting study. A proportion of questions used in the reference examination are reused in identical form in each new examination version to be equated. Usually 25-40% of questions in an equated examination are used in the reference examination. The analysis determines the relative difficulty of the new examination with respect to the reference examination and computes equated scores for the new examination to accommodate the difference in difficulty. The equated scores are then approved by Council.

Equating is not always appropriate. A new standard setting study should be conducted:

- Every time the test plans change, either because a new role delineation study has been conducted (requiring new test plans) or the test plans are changed for other reasons.
- When the structure, format, or distribution of content in an examination changes sufficiently that the scores achieved by minimally competent, entry-level candidates may be affected, and thereby change the passing standard (eg. in 2017 when the exam was moved to a one-day format in Tampa).