



Equine Veterinary Curriculum Review

What are the strengths, weaknesses, gaps, and redundancies in the CSU Equine Curriculum?

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Introduction

The majority of educators strive to provide an educational experience that provides their students with the information necessary for them to be successful once they have completed their course of study. However, it is not uncommon to hear that employers do not think our veterinary graduates are ready to perform the tasks they want them too immediately after graduation. At Colorado State University, we decided to ask our students how well we addressed and prepared them for Core Competencies for New Veterinary School Graduates in Equine Practice identified by the American Association of Equine Practitioners.

The Problem: We think we do a good job with our curriculum, the question is, do our students and their employers agree?

Methods and Materials

A survey was sent to large animal track students of Colorado State University (CSU) that have graduated in the last five years. Questions centered on the American Association of Equine Practitioners Competencies, listed as the Business of veterinary medicine, Client education and Regulatory responsibilities, Anesthesia, Examination, Husbandry, Medical knowledge, Radiology, and Reproduction and Surgery techniques. The students were allowed to give responses of free text. (Figure 1)



Figure 1. Hubbell JAE et al. "Frequency of activities and procedures performed in private equine practice and proficiency expected of new veterinary school graduates." Perspectives in Professional Education, JAVMA 2008.

The first main question was: How well did the CSU equine veterinary curriculum address the following areas? Answer options were: too much, just right, not enough.

The second main question was: How well did the CSU equine veterinary curriculum provide practical skills in the following areas? Answer options were: excellent preparation, good preparation, moderately unprepared, severely unprepared.

Results

The response rate was 31% (37/117). The breakdown per class is listed in Figure 2. Figure 3 shows the percentage of students pursuing specialties.

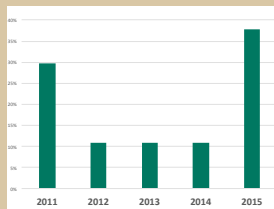


Figure 2. Number of respondents from each class

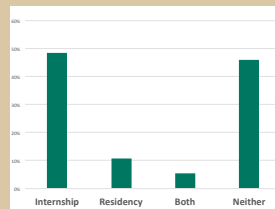


Figure 3. Percentage of respondents pursuing specialty training

First Question: There were 4 of the 11 categories where more than 30% of the respondents felt that there was not enough theoretical information in the curriculum to make them feel confident in practice. Those categories were: Business (49%), Dentistry (32%), Radiology (32%) and Surgery (41%). They felt most prepared in Anesthesia, Physical Examination, Reproduction and Basic Techniques. (Figure 4)

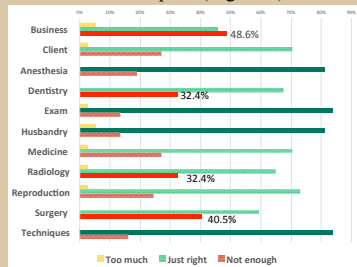
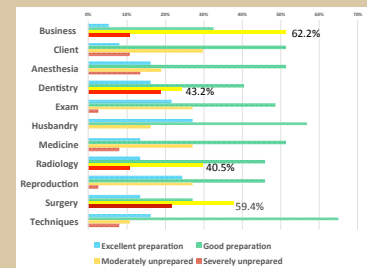


Figure 4. Percentage of respondents that listed: Too Much (yellow), Just Right (green), Not Enough (Red) when answering the question: How well did the CSU Equine Veterinary Curriculum address the listed areas? Solid red bars highlight areas where >30% of respondents thought there was non enough in the curriculum. Solid green bars highlight areas where >80% of respondents thought that the curriculum was just right.

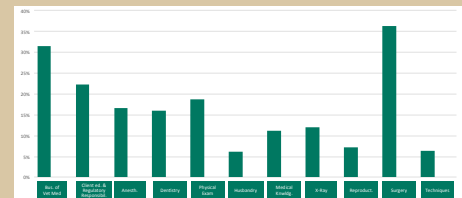
Second Question: When combining the unprepared responses, >40% of students felt unprepared in 4 of the categories: Business (43%), Dentistry (43%), Radiology (41%) and Surgery (59%). They felt most prepared in Client interaction, Anesthesia, Husbandry and Basic Techniques. (Figure 5)

Figure 5. Percentage of respondents that listed: Excellent Preparation (blue), Good Preparation (green), Moderately Unprepared (yellow), and Severely Unprepared (Red) when answering the question: How well did the CSU Equine Veterinary Curriculum provide you with Practical Skills address the listed areas? Solid red and yellow bars highlight areas where, when combined, >40% of respondents thought that they were either moderately or severely unprepared with regards to practical skills by our curriculum.



We also evaluated our data to look at those students that felt that our curriculum provided either just the right amount or too much detail to see how many still felt unprepared. (Figure 6)

Figure 6. Percentage of student that felt that our curriculum provided either just the right amount of detail, or even too much detail that still felt unprepared for their first job.



Discussion

It is clear to us that we have some work to do to improve our curriculum to provide our students with the skills and confidence necessary to be successful in equine practice. Tertiary referral centers have to work hard to make sure the students get the basic training they need when they take on their first employment. Basic surgical skills, dentistry skills, imaging skills and business skills top the lists of concerns from our previous five years of graduates.

Next Steps/Our Response

Immediate Changes: Instituted some basic laceration repair on suture pads and hand ties when the caseload is slow. Added a two-week "Equine Specialty Rotation" in the 4th year (starting June 2017) with 1 week covering intensive dentistry (including: imaging, anatomy and hand's on laboratories) and 1 week covering lameness (including: lameness evaluation, peripheral nerve blocks, joint blocks, imaging, hand's on laboratories). The didactic curriculum will be reviewed to shore up the holes or unnecessary overlap. Developing a required tasks/skills checklist that students must perform while on rotation. Set aside time in the clinical rotation to perform skills that haven't been accomplished. Will require new models to assist our students in becoming proficient with these skills. Our Equine Field Service faculty have been working on opportunities to evaluate business education.

Acknowledgements

Thanks to our recent grads that participated in the survey and took an interest in helping those that come behind them gain a more complete education.

