Curricular Review Report

December 2019

Curricular Review Mission & Vision:

The purpose of this curricular review is to evaluate and determine the strengths, weaknesses, and opportunities for growth within our curriculum. The review fulfills our obligation to examine our curriculum every seven years under AVMA accreditation guidelines, and furthermore considers what aspects of the current framework do and do not align with goals set by the Curriculum Strategic Planning Committee earlier this year.

Understanding the quality of a complex curriculum requires conscientious perspective-taking from many different viewpoints to consider the content being delivered & learned, the structures through which we organize learning, and the social, emotional, and cognitive contexts in which learning occurs. Thoughtful and critical evaluation involves balancing critique with an awareness of the history and culture of hard work from which the existing curriculum has grown.

Process

To achieve this task, we gathered eight members of the CVM faculty and staff, plus one graduate of the program who is a practicing DVM. This "Core" team met throughout the Fall 2019 semester with a mix of faculty and staff representatives from every academic department, Educational Support Services, Student Services, and Student Affairs.

The curriculum was divided into four dimensions for consideration:

- 1. AVMA CoE Standard 9: Curriculum, inclusive of content, duration, management, evaluation, and instructional quality and effectiveness.
- 2. AVMA CoE Standard 11: Outcomes assessment, inclusive of NAVLE pass rates, data gathering from recent graduates, and formative and summative evaluation of current students to ensure the attainment of required competencies.
- 3. Student Experience, as defined as
 - a. Engagement of students with teaching and learning
 - b. Support and mentoring
 - c. Wellness and well-being
 - d. Climate and culture

- 4. Effectiveness and efficiency of educational practices, as defined as
 - a. Student achievement of learning outcomes at course and curricular levels
 - b. Preparation for subsequent courses and, ultimately, clinical practice
 - c. Use of curricular time
 - d. Alignment of curriculum, assessments, and outcomes, in accordance with best practices in education.

Particular attention was paid to the structure, organization, and policies defining each area of the curriculum and how students and educators interacted with and within the existing framework.

Critical thought was encouraged through the use of a "Red Team / Blue Team" format including rotating team assignments. Each meeting, "Red Team" members were tasked with identifying those areas in which we fail to meet expectations or have room for growth, and make recommendations on directions for that growth. "Blue Team" members were tasked with identifying areas in which we successfully meet needs and objectives, and suggest ways we can develop our strengths even further.

Conclusions were drawn from a wide range of quantitative and qualitative data sources, including but not limited to: course learning outcomes, student / faculty / employer / alumni / advisor surveys, NAVLE reporting, AVMA economic reports (job market), administrative summaries, and participant interviews. We used national benchmarks and internal objectives as guidelines to determine if we are effectively and efficiently achieving the curricular goals set by the AVMA and the Curriculum Strategic Planning Committee.

Findings

AVMA CoE Standard 9: Curriculum

Strengths

- ❖ Instructional time is devoted to every competency area identified by Standard 9.
- ❖ Learning Outcomes maps allow for rapid searching and collating of curricular content by ESS and Curriculum Review Committees.

Weaknesses

➤ Integration of content is hampered by siloed courses and some concepts that would be best taught as interwoven throughout the curriculum are addressed only briefly in narrowly defined contexts. (e.g. Population and Global Health, Culture and Diversity)

- ➤ Organizing content by "-ology" first and species second is not consistent with a competency-based backwards design. Content integration would be better supported by a systems or process orientation.
- ➤ Selectives represent 12 weeks of the Curriculum with wide variance in quality, relative importance for different focus areas, and value added. A large amount of "core" content (e.g. business curriculum, exotics, global health, etc) is forced into selectives. This creates bottlenecks, reduces breadth of learning for the student base, and disadvantages those in smaller focus areas.

AVMA CoE Standard 11: Outcomes assessment

Strengths

- Surveys, reports, and summative assessments show that our graduates have the basic scientific knowledge, values, and most skills required of an entry-level veterinarian. Remediation structures are in place for academically low-achieving students in the first three years.
- ❖ Analysis of student and alumni surveys has been invaluable and alumni response is on the rise.
- ❖ All nine COE competencies are taught and assessed summatively. Formative assessment use is increasing across most courses.

Weaknesses

- The development and observed evaluation of competence in clinical or advanced settings is a significant concern, based on alumni, employer, faculty, and student reports.
 - There is a consistent sense among faculty and staff that students are unprepared for clinics.
 - It is difficult to pinpoint where skills are explicitly taught and assessed within the clinical curriculum, leading to many skills "falling through the cracks".
 - The clinical environment does not provide timely assessments and remediation opportunities where needed.

Student Experience

Strengths

- Selectives, electives, clubs, externships, and other opportunities provide excellent learning and engagement experiences outside the standard "core" curriculum.
- ❖ Student feedback is used heavily for evaluating course quality and influencing the direction of development.

Student evaluations paint a generally positive picture of the college and learning experience. Satisfaction with career and specialization choices is high.

Weaknesses

- The number of students seeking counseling for stress and anxiety issues related to academics and quality of life is increasing.
- There is too much variance in the quality of communication from advisors.

 Communication issues exist between advisors, student services, and the students.
- Messaging around academic priorities is muddled. Our typical course design and instruction emphasizes grades over growth and mastery of the content (or conflates the three) in the first three years. Then we expect students to have a growth mindset and mastery orientation towards skills development while in clinics, without providing consistent formative feedback. Our implicit messaging is antithetical to our explicit mission to develop growth and mastery minded students.
- > Student trends towards solo study and avoidance of lectures presents a source of potential disconnection between students and faculty. A majority of students prefer to study alone rather than in groups, to attend tutoring sessions, or to attend instructor office hours. A majority of students (55.6%) do not believe that lecture attendance will improve their academic performance. Faculty who design their lectures around the assumption of attendance need to be aware of this and adapt accordingly.

Effectiveness and Efficiency of Educational Practices

Strengths

- ❖ Course Coordinators, ESS, FCCCE, and Department Heads collaborate to have session-level learning outcomes written for most courses. These learning outcomes are tracked in an easily searchable system by ESS.
- Clinical Problem Solving, labs, and other courses engage students in interactive learning activities that stress higher order thinking.
- ❖ Various organizations coordinate to provide a suite of educational skills development opportunities. For example, ESS, the Academy of Educators (AoE), the Office of Faculty Development (OFD). Furthermore, our growing relationship with the South East Veterinary Education Consortium (SEVEC) is providing increasing amounts of professional development content for educators.
- ❖ Moodle course page quality growth through ESS is visible.

Weaknesses

- ➤ Understanding of what constitutes best pedagogical practices and strategies remains mixed, at best, across the faculty and staff (e.g. "What is active learning?", "What is the difference between formative and summative and why do we care?"). There is some perception that "best practices" are a poor fit for professional curricula. Reframing and continued education is needed.
- ➤ Learning outcomes need continued refinement, particularly around the intersection of courses within and between years.
- There is no system or map for ascertaining course prerequisites and establishing that content delivery is appropriately timed. The current system relies on individual faculty to meet and discuss on a one to one level that cannot effectively consider the whole of the curriculum.
- > Skills and knowledge development are not mapped together, making it quite difficult to integrate the two efficiently and effectively.
- ➤ Engagement with professional development varies greatly by instructor, leading to highly differing conceptions of the curriculum, pedagogy, and best practices.
- ➤ Assessment of teaching quality rests on student evaluations and rare peer observations that are tied to promotion, which involves problematic motivations on the part of observers

Recommendations

- ★ Revise the Curricular Map to organize content delivery schedules around systems or processes.
 - To better support content integration for learning, and course coordination between and within years.
 - To make the when / where / how / why of learning clearly understood by faculty and students.
 - To better align prerequisite skills and knowledge base growth towards clinical competency development.
- ★ Implement an integrated capstone assessment for each of the 1st, 2nd, and 3rd years, to be given at the end of Fall or Spring semester.
 - o To ensure the assessment of critical skills and knowledge bases.
 - To assess the meeting of outcomes at the year level (as opposed to only course level).
 - To facilitate integration of concepts.
 - To allow courses more flexibility to focus on providing formative feedback.

- ★ Revise the system of skills assessment and remediation in clinical rotations to increase clarity and ensure the teaching of core concepts.
 - To assess competency in a time frame that allows for remediation.
- ★ Review the balance of Core content with Elective/Selective. Transition towards a concept of Core content for all students that includes exposure to some content that is currently buried in selectives that are not truly accessible to all.
 - o To identify that content which should be taught to all students, and integrate it.
 - To allow Selectives / Electives greater ability to specialize for students in the related focus area or specialization.
- ★ Restructure the student working week to allow for more flex time. There are many paths to this for consideration.
 - To increase wellness by increasing choice in how / where / when content is consumed.
 - To allow students the adaptability to shape their learning around their needs.
- ★ Increase exposure to clinical concepts, environments, and problem solving in the first three years. There are many paths to this for consideration.
 - To ease the transition from year three to clinics.
 - To improve the integration and understanding of content by contextualizing early learning.
 - o To reduce cognitive load in clinics, allowing for more and easier growth in skills.
- ★ Review training and support of advisors.
 - To increase their capacity to support students in terms of academics and professional guidance.
 - To increase their capacity to support student wellness.
 - To reduce miscommunication throughout the system.
 - To support advisor wellness and satisfaction.
 - o To make the system more efficient and effective overall.
- ★ Develop a feedback system for values and professional dispositions development.
 - To increase the clarity of messaging for faculty, staff, and students.
 - To create clearer pathways for remediation when a student fails to meet expectations.
 - To create clearer options and supports for faculty and advisors in working with students who need help developing appropriate professional dispositions.

Next Steps

Findings of the Curricular Review Committee are to be shared and discussed with the CVM and its stakeholders through various means in Spring Semester of 2020:

- Presentations at Town Halls and Department Meetings
- Roundtable series for faculty and staff
- Student focus groups
- Employer updates and conferences
- Updated Curriculum Review Website