Addressing Faculty Development Needs among Veterinary Medicine Faculty
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Objectives

Following today’s presentation participants will be able to:

1. Explain why and how faculty can teach responsively to meet students' learning needs.
2. Describe how faculty development can lead to: (a) improving and/enhancing instruction and (b) aligning assessments with instruction.
3. Consider how a faculty development model used in the College of Dentistry might be adapted and implemented for College of Veterinary Medicine faculty.
Teaching responsively and how

- As instructors, it is our academic and professional obligation to teach in ways that benefit successful student outcomes, professional mandates and social needs.

- **What guides how we teach** --
  - How we were taught?
  - How we want students to learn? How today’s students learn?
  - How we want to teach?
  - Students’ learning needs or prior knowledge/ experience?
Self-regulated learning

- Most of us are mindful, intentional, reflective, introspective, self-aware, self-controlled, and self-disciplined about learning.
- But many students are not. Thus we need to plan activities that promote student’s conscious efforts to plan, monitor, evaluate, and control their own learning in order to maximize it.
Research on self-regulated learning

- Few students demonstrate self-regulation — not even professional school students. 132 veterinary students were asked to cite the most important factors in their learning. Most **commonly cited** — quality of their faculty’s instruction, not their own effort or learning skills (Ruohoniemi & Lindblom-Ylänne, 2009).
- Not surprisingly, younger, undergraduate students have the same mind set.
- Students see learning as something that is “happening” to them instead of being an active process.
How to promote self-regulated learning

1. First explain to students what it is.
2. Tell students about the meta-emotional and environmental dimensions of SRL and the questions that are likely to ask themselves while learning, such as…
1. How motivated am I to do the learning task, and how can I increase my motivation if I need to?

2. If my confidence lags in my ability to learn this material, how can I increase it without becoming overconfident?

3. Am I resisting material that is challenging my preconceptions?

4. How am I reacting to my evaluation of my learning?

5. How can I create the best, most distraction-free physical environment for the task?
How to promote self-regulated learning

• Have students answer two or three reflective questions on the reading or podcast.
• Ask them to write about what they learned by doing an assignment.
• Have them re-do the same or similar problems to the ones they miss on their homework and exams and explain the proper procedure.
How to promote self-regulated learning

- Have them describe their reasoning process in solving a “fuzzy” problem – how they defined the problem, selected principles and concepts to apply, developed alternative approaches and solutions, and assessed their feasibility, trade-offs, and relative worth.
- Students won’t see the impact of these assignments, but you will.
Working with Teach-Savvy learners

- Move responsibility for learning content to podcasts, and voice over PowerPoints outside of class time.
- Give clear directions for what you want students to know and how you want them to apply new information.
- Create digital games that allow students to learn material and test their own knowledge.
Use group processes

- Service Learning, Clinic Assignments in varied practice locations
- Team-based learning – Have students quiz as individuals, retaking quiz as group and grade individual responses versus team responses.
- http://www.youtube.com/watch?v=gW_M426V2E0&feature=youtu.be
Class time becomes experiential or active.

- Convert class time to work sessions –
- Start class with a problem that requires students to apply new information to a patient case, clinical issue, safety, or professional regulation.

http://video.dental.ufl.edu/Mediasite/Play/d53749ecd6e342e689748a0f00ad5bcd
Small group case based-learning

- Students, placed in groups of 10, receive a case that is comprised of three subsections. They read case aloud, to consider what they know and identify knowledge gaps. Next, on their own, students gather material they need to problem solve and return in a week to ten days and present that information to one another.

- Faculty are facilitators – guide, but do not lead student groups.
Where should we start?

- Articulate a picture of what you want students to be able to do as a result the teaching/learning/clinical experiences.

- Design student experience that fulfill the outcomes sought.
Teaching, Explicit Guidance and Student Accountability

State course objectives – Focus on higher order skills

Avoid list of outcomes related to knowledge and understanding.

Select content linked to objectives

Provide varied learning experiences (individual and group, presentations) that likely promote attaining course objectives

Use assessment that require range of skills (knowledge, analysis, synthesis, critical thinking) linked to course objectives and learning experiences
BENEFITS OF FACULTY DEVELOPMENT
Faculty development impacts: attitudes, knowledge, and skills, though it starts with reflection

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<td>About students as learners</td>
<td>Theory</td>
<td>Theory</td>
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<td>About individuals as teachers</td>
<td>Curriculum</td>
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<td>About veterinary medical education</td>
<td>Research</td>
<td>Research</td>
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<td>Leadership</td>
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Faculty development can lead to change in attitudinal beliefs.

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<th>I. Attitudes</th>
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<tr>
<td>About students as learners</td>
<td>Aware of learner needs, preferences, and prior knowledge, more open to interaction.</td>
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<tr>
<td>About themselves as teachers</td>
<td>Aware of their teaching styles, personal preferences, self-efficacy and lack of efficacy, teaching philosophy and beliefs about how students learn best, how your own verbal/non-verbal behavior impacts learning environment and students’ perceptions of your approachability.</td>
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<td>About veterinary medical education</td>
<td>Awareness of the complex relationship between teaching, learning, curriculum and instruction, appreciation for curriculum design theory, approaches to evaluation and teaching, classroom dynamics,</td>
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## How FD can promote knowledge

<table>
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<th>2. Knowledge</th>
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<tr>
<td><strong>Theory</strong></td>
<td>• Review literature that illustrates educational theory in action.</td>
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<td>• Describe the dominant theories that guide teaching and learning.</td>
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<td><strong>Curriculum</strong></td>
<td>• Describe the elements of curriculum design.</td>
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<td>• Describe Bloom’s cognitive taxonomy.</td>
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<td><strong>Research</strong></td>
<td>• Become acquainted with methods for conducting educational research.</td>
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<td>• State purposes of quantitative, qualitative and mixed methods research.</td>
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<td><strong>Leadership</strong></td>
<td>• Learn about differences between leaders and managers.</td>
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<td>• Describe the change theories discussed in the literature.</td>
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How FD can build skills repertoire of skills

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<th>3. Skills</th>
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<td>Theory</td>
<td>• Participants describe the behaviors of the best teachers they have had.</td>
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<td>• Describe characteristics of best students.</td>
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<td>Curriculum</td>
<td>• Observe others teach and describe instructional strategies observed.</td>
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<td>• Use a list of objectives and identify representative taxonomic level.</td>
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<td>• Critique videos of residents, students, and patients in clinical practice; describe how feedback is given.</td>
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<td>Research</td>
<td>• Critique educational research studies. Identify areas for improvement,</td>
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<td>• Critique poorly and well constructed surveys.</td>
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<td>Leadership</td>
<td>• Assess institution’s stated educational mission; identify processes that support the mission.</td>
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<td>• Identify hidden curriculum in institutional culture.</td>
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RESEARCH-BASED EVIDENCE SUPPORTS THE CONTRIBUTIONS OF FACULTY DEVELOPMENT
Research-based contributions

- In 2009 dental and physical therapy faculty enrolled in a 6-week seminar around the principles of critical thinking and andragogy (the art and science of helping adults learn).
- To assess sustainability of changes observed in the seminar, a year later in 2010, participants were interviewed and observed while teaching.
- Results indicated discernible changes (seen in 7 of 9 participants in 2009) in teaching practices, especially in relation to developing students’ critical thinking skills had sustained.
Research-based contributions: Other evidence

- Increased cognition of the importance of promoting active learning.
- Increased awareness of the need to provide students with opportunities to problem-solve rather than solving problems for them.
Research-based contributions: Other evidence

- Increased awareness of my beliefs about teaching and what I am supposed to teach.
- Recognized need to be comfortable with not always having the answer; turn that moment into a teaching opportunity for myself and others.
Barriers to faculty development

- Not enough time
- Lack of department/institutional support
- Little recognition for teaching in promotion process
- Pressure from competing responsibilities – clinic, administration, research, and service.
OVERCOMING BARRIERS
<table>
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<th>BARRIERS</th>
<th>GOLDEN OPPORTUNITIES</th>
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<td>Not enough time</td>
<td>Engage your graduate students or those from other HSC to work with you.</td>
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<tr>
<td>Lack of department/institutional support</td>
<td>Set your own research agenda, present and publish outcomes from your research initiatives.</td>
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<td>Little recognition for teaching in promotion</td>
<td>Publish studies of teaching, the impact of teaching innovations on student outcomes as well as unique curriculum designs.</td>
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<td>Pressure from competing responsibilities —</td>
<td>Discipline. Organize use of time. Develop a vision and enact it. Build a collaborative network of like minded colleagues, intra- or inter-departmental, or outside the institution AND employ, your graduate students or those from other HSC to assist you.</td>
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First step – assess stakeholder needs (UFCD, n = 73)

- 73.3% to 91.8% rated knowledge of teaching items low; most rated their priority for training as low indicating a need for these skills even when they don’t think they are high priority.

- 66% of faculty rated knowledge of scholarship as low and priority for training as high.
Frequency of Unmet faculty needs

- Faculty Development
- Pub/Cond Research
- Mentoring
- Grant Writing
- Leadership

FREQUENCY
A FRAMEWORK FOR DEVELOPING A FACULTY DEVELOPMENT PROGRAM
UFCD Model

TEACHING OBSERVATIONS
- Formative Feedback
- Collegial Interactions
- Innovations

MENTORING
- Regularly scheduled meeting
- Review course content and test construction
- Building educational portfolios
- Developing promotion & tenure packet

EDUCATIONAL RESEARCH
- Concepts and methods
- Mentored experience in writing
- Display current studies and alignment with methods

ASSESSMENT FOR LEARNING
- Approaches to evaluation
- Creating authentic assessments

SEMINARS
- Presented on site
- Available on FD website
- 3 online accredited courses
College of Dentistry

- Invited faculty to conduct research studies together about the scholarship of teaching—to compare traditional and uses of other methods such as TBL, small group case based learning, or other group processes that augment student engagement and shift the “learning” to the students. Other research explores impact of service learning, student wellness, and reflective writings.
GRANT SUPPORTED FACULTY DEVELOPMENT WEBSITE

http://cod-faculty-development.sites.medinfo.ufl.edu/
Online courses

- 3 Courses, 24 CEU each course
- Courses consist of 6 modules – 6 months to complete from time of registration
- Use a asynchronous platform, combination of assigned textbook reading, narrated presentations, reflection papers, collaborative activities and individualized, customized instructor feedback to participants during the course.
Course #1 - **Essential Concepts of Teaching & Learning**

- Acquire skills *for* creating and modifying courses through self-awareness activities and evidence *from* curriculum that informs your teaching across content areas.
1. Construct a personal teaching philosophy statement.

2. Describe how your beliefs about teaching influence the ways in which you teach.
Course #2 - Effective Instruction Approaches

• Build self-awareness regarding teaching styles, expand use of teaching models, and display use of critical thinking instructional strategies
1. To describe self-efficacy.
2. To explore the correspondence between self-efficacy beliefs, beliefs about instructional practice and teaching.
Course #3 - Assessment Techniques for Teaching & Learning

Develop familiarity with hands-on activities that broaden the repertoire and use of assessment techniques, including writing your own rubrics.
1. Using what you have learned during this session, develop a rubric to evaluate your teaching and post online.

2. After receiving feedback from your peers, pilot test its effectiveness by asking students to complete it.
Concluding remarks

How you teach is grounded by:

- Views of you relationship to the content and how you teach, and teaching self-efficacy, insight into how students learn
- Willingness to engage students actively
- Facility with range of teaching approaches
- Try out new methods in a community of learning
- Training and experience
Questions?
References

- Behar-Horenstein LS, Garvan CW, Catalanotto FA, Hudson-Vassell, C. The Role of Needs Assessment for Faculty Development Initiatives. *J Fac Dev* 2014; 28:


References


Lloyd JW. Developing a curriculum to improve the skills, knowledge, aptitudes, and attitudes of veterinary students. *Journal Am Vet Med Assn* 2002; 220: 976-977,
References


